Stick Reader

SDL 400S

USER MANUAL

for

Windows & Mac

Links to mobile apps, printers and weighers.

Version 01.09.2015

Copyright © 2015 Shearwell Data Ltd

Table of Contents

Getting started - Page 3

Battery information - Page 4

Reading tags - Page 5

Menu options - Page 6

Add a Bluetooth adapter to a Windows PC - Page 8

Install stick reader software: Windows - Page 9

Install stick reader software: Mac - Page 10

Bluetooth connection: Windows - Page 11

Bluetooth connection: Mac - Page 14

Open SDL Connect: Windows - Page 16

Open SDL Connect: Mac - Page 17

Options for downloading: Windows - Page 18

Download tag numbers: Windows - Page 20

Options for downloading: Mac - Page 21

Download tag numbers: Mac - Page 23

Configure the stick reader: Windows - Page 24

Configure the stick reader: Mac - Page 24

Link to a mobile printer - Page 26

Configure print options: Windows - Page 28

Configure print options: Mac - Page 29

Print options on the stick reader - Page 30

EID Formats - Page 31

Working with tag files: Windows - Page 32

Working with tag files: Mac - Page 34

Trouble-shooting - Page 36

Appendix I: Android phone - StockMove Express- Page 37

Appendix II: Link to a EziWeigh7 - Page 39

Appendix III: Link to a ID3000 weigher - Page 42

Contact us - Page 45

Getting started

The SDL400S stick reader comes complete with everything you need to get started.

- SDL stick reader
- Shearwell SDL Connect software
- Battery pack and four rechargeable AA batteries
- Mains battery charger
- Car adapter for battery charger

Turn the stick reader on and off

Press and release the green button once. The LCD screen will light up and display the start-up screen (version number and the battery level).

Turn off the stick reader by pressing and holding the green button for at least two seconds until the LCD screen shuts off. If the stick reader is left idle for five minutes it will turn itself off to conserve battery power. Shutdown time can be changed on the computer with ***SDL Connect > Stick Configuration***

Warning: The Shearwell label above the display should NOT be removed! The serial number, product codes and Bluetooth address are printed on the back. Removal of the label will void any warranty.

Battery information

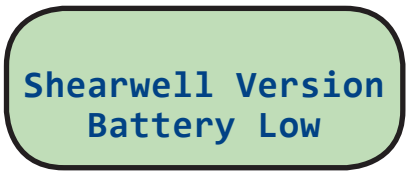
The stick reader comes with four AA rechargeable batteries. Standard AA batteries can also be used.

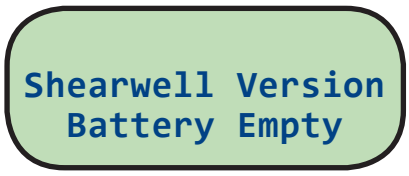
Inserting batteries
Note: You will not lose your data when you remove the battery pack.

1. Open the stick reader by unscrewing the end of the red or blue handle. Use the white loop to pull out the battery pack.
2. Insert the batteries into the holder ensuring the positive and negative markings (+ / -) on the batteries match up with the (+ / -) on the holder.
3. Insert the battery pack with the green arrow and green circle facing the same direction as the green button on the reader. Ensure that the battery pack is aligned with the grooves inside the stick reader.
4. Replace the end of the reader by screwing the cap on. *Warning: Do not over-tighten the battery cap as this could damage the thread.*

Check the battery level
The battery level indicator shows very briefly on the start-up screen when the stick reader is turned on. To check the level of the batteries when the stick reader is turned on, first turn it off, then turn it back on to see the start-up screen.

The stick reader should operate for at least eight hours on a fully charged set of batteries. For the first several hours the battery indicator will show ***Good***. When the battery indicator first shows ***Low*** you should still have one or two hours of use left, but should plan to recharge or replace the batteries soon. A sign the batteries are getting low is the stick reader is unable to maintain a Bluetooth link to a printer or weigher. When the indicator shows ***Empty*** the batteries should be recharged or replaced immediately.





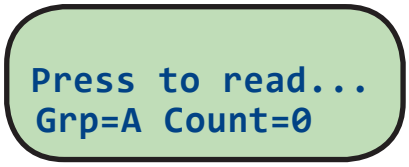
Charging the batteries
Use the supplied battery charger to recharge the batteries. The mains and car adapter for charging the stick reader batteries are labelled “Battery Charger”. Place the batteries in the charger, ensuring that the positive and negative markings (+ / -) on the batteries match up with the (+ / -) on the charger. Charging the supplied batteries from flat to full should take about four hours.

The mains and car adapter for charging the printer are labelled “Printer Charger”. Be careful not to confuse the battery charger and printer charger leads because you could damage them by using the wrong adapter!

WARNING: *If you are using a Bluetooth printer with a stick reader be sure to use the correct adapter for each when re-charging. Shearwell Data Ltd. will not be liable for damage caused by failure to use the correct charger.*

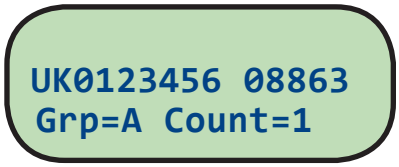
Reading tags

Turn on the stick reader. Press and release the green button once. You don't need to hold the button down. The stick reader will begin to scan for an EID. For information on Rapid Read mode see page 7.



EID found

If an EID is within range the light ring at the end of the stick reader will flash green and a short 'beep' will be heard. The EID number will show on the LCD screen and be stored in the memory. The group count will be increased by one. The stick reader is ready to scan for another EID - press the green button once to start scanning again.



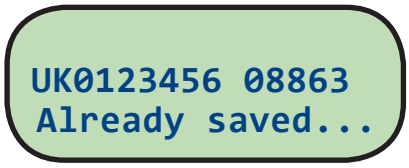
EID not found

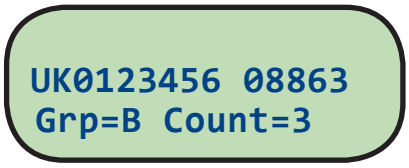
If the stick reader scans but no EID is found the screen will display ***No EID found***. The light ring will glow red and a different long 'beep' will signal a failed read.

EID already stored in memory

If the same EID tag is read more than once, the screen will briefly display the message ***Already saved***. The light ring will flash red and a short beep will indicate that this number is already stored in memory for this group. The second 'read' is not stored and the count is not increased.

If the same EID tag is scanned in a <u>different</u> group the stick reader will treat it as a new number and record it as an EID found.





Note: This information is for individual reading, not Rapid Read mode. Learn about Rapid Read mode in the Menu Option section on page 7.

Menu options

The menu is a list of options for changing the way the stick reader functions. The menu is only accessible when the stick reader is turned on.

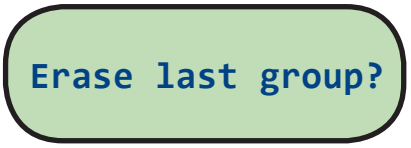
1. Turn off the stick reader by holding down the green button.
2. With the stick reader off, press and hold down the green button. Continue holding down the green button to view all the menu options.
3. Release the green button to make a selection.
4. To exit the menu without making changes and return to scanning, wait for the ***Cancel*** option and release the green button.

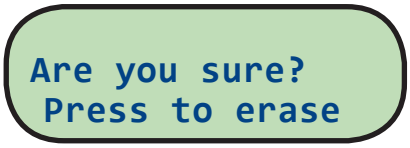
Menu options

Your own stick reader may not have every option listed here.

New group
Animals are always recorded into a group. The default group is "A" but you can create different groups beyond that, named in alphabetical order. However, only one group is active at a time, so once you create a new group you can not go back to a previous group unless you erase your latest group by using the ***Erase last grp*** option from the menu.

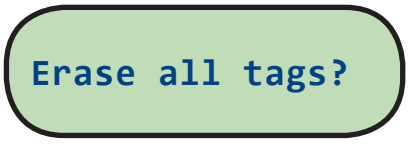
Print options are available if the stick reader is linked to a Bluetooth printer. See page 18.

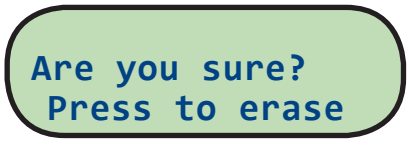




Erase last group
When a grouping of animals is no longer wanted, erase the group and all the EID numbers stored inside it will be deleted. This will result in the previous group becoming the active group.

Select ***Erase last grp*** from the menu. Confirm by pushing the green button again before the end of the countdown. If you do not push the green button before the end of the countdown the action will be canceled.





Erase all tags
This function deletes all the EID numbers stored in memory. The stick reader software can store thousands of EID numbers but the more tag numbers in storage, the slower the process of scanning and saving each tag. Once you have exported or printed tag numbers it's advisable to delete them. Erasing all tags also allows animals to be re-scanned and their EID number saved again.

Select ***Erase all tags*** from the menu. Confirm by pushing the green button again before the end of the countdown. If you do not push the green button before the end of the countdown the action will be canceled.

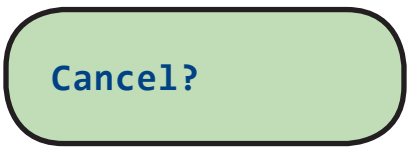
Menu options

Disable memory
Disabling the memory allows tags to be scanned and the number displayed but the EID is not stored.

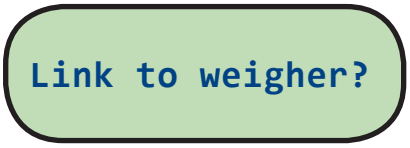
Select ***Disable memory*** from the menu. To re-enable memory after disabling it, select the ***Enable memory*** option from the menu.

Rapid Read mode
When set to ***Rapid Read*** there is no need to press the green button for every animal - the stick reader will be constantly scanning for tags. The stick reader will look for new tags continuously for up to 12 seconds. If no tags are detected in that 12 seconds, the stick reader gives a long beep, stops scanning and goes on standby to conserve battery power. Press the green button again to start scanning again.

Select ***Rapid read on*** from the menu to change from ***Press to Read*** to ***Rapid Read***. Press and release the green button once and the stick reader will be constantly scanning for tags. Press the green button a second time to stop scanning. To disable rapid read mode and return to individual read, select ***Rapid read off*** from the menu. Note that the stick reader remembers the last mode selected when it was turned off and will start in that mode when next turned on.



Cancel
This option will close the menu without any changes to the settings.



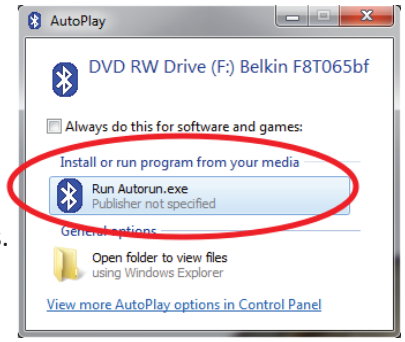
Link to weigher
This option is available if the stick reader is configured to link to a Bluetooth weigh head. See page 28.

Print options are only available if the stick reader is linked to a Bluetooth printer. See page 26.

Add a Bluetooth adapter to your Windows computer

The stick reader can be wirelessly connected to a computer using Bluetooth. EID numbers stored on the stick reader can then be imported into the computer, using the special software provided. If your Windows computer does not already have Bluetooth capabilities then Shearwell Data Ltd. recommends a Bluetooth adapter from Belkin. These can be supplied on request.

Bluetooth is often indicated by this symbol.

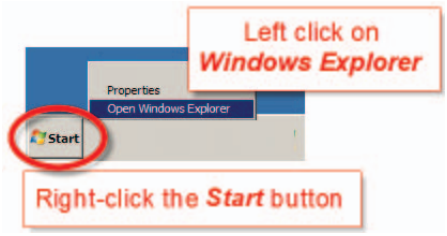

AutoPlay
DVD RW Drive (F:) Belkin F8T065bf
Always do this for software and games:
Install or run program from your media
Run Autorun.exe
Publisher not specified
Open folder to view files
using Windows Explorer
View more AutoPlay options in Control Panel

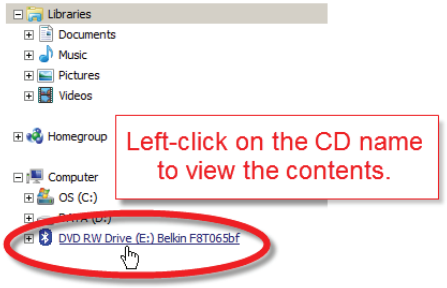
Install Belkin Mini Bluetooth adaptor - Autoplay

1. Insert the Belkin CD into your computer. If the Autoplay screen appears select ***Autorun.exe***.
2. When the Belkin installation screen opens, plug the Bluetooth adapter into a USB port on your computer.
3. On the installation screen click on ***Install*** and follow the instructions.

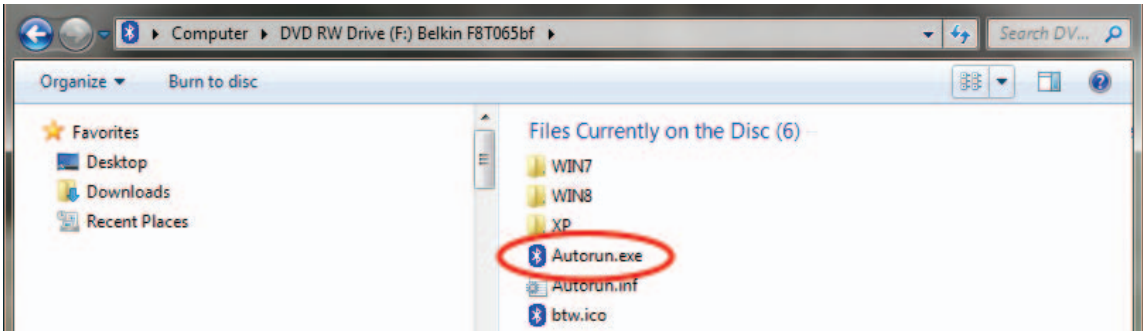
Install Belkin Mini Bluetooth adaptor through Windows Explorer

1. Insert the Belkin CD into your computer.
2. Find the Windows icon or the ***Start*** button in the bottom right-hand corner of your computer screen.
3. Left-click with your mouse on the ***Start*** button. Right-click on ***Windows Explorer***.
4. On the left, under ***Computer***, find the CD in the DVD drive.
5. Left-click on the CD to view its contents.





6. Select ***Autorun***.



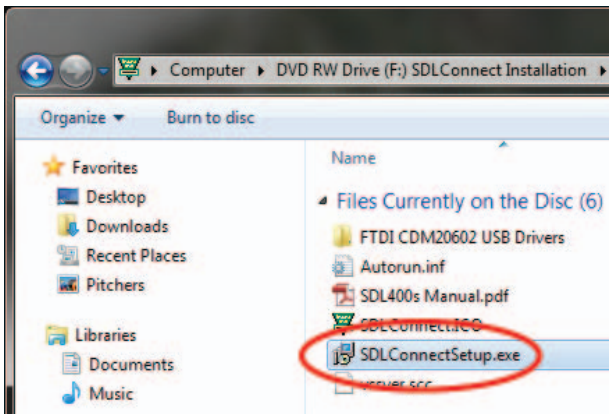
7. When the Belkin installation screen opens, plug the Bluetooth adapter into a USB port on your computer.
8. On the installation screen click on ***Install*** and follow the instructions.
9. It's recommended to leave the Bluetooth adapter plugged into the USB port because a connection must be re-established every time the adapter is removed.

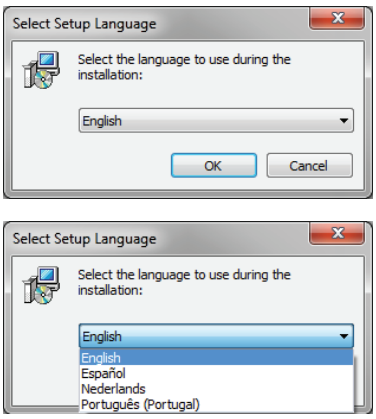
Install the software - Windows

The software program for connecting your stick reader to your computer is called **SDL Connect**. Install this software on your computer from the CD website before you start scanning tags. The software allows you to transfer information between the stick reader and your PC. Being able to connect your stick reader to your PC is useful even if you are only planning to link your stick to a mobile printer. Changing configurations and keeping the date and time correct are all done through the computer software.

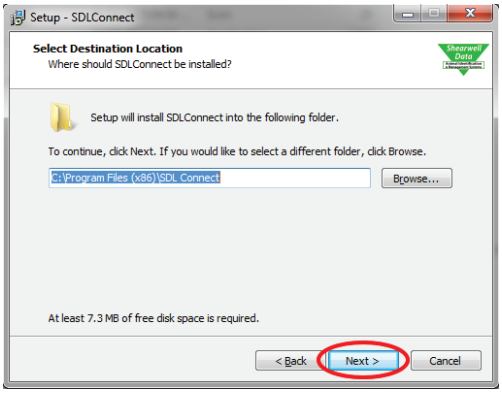
We recommend all other programs on your computer be closed before you start the installation process.

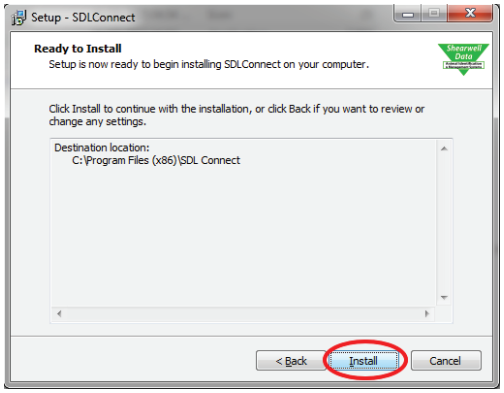
1. Insert the **SDL Connect** software CD into your computer. The AutoPlay window should open. Click on ***Install SDLConnect***. If the Autoplay window does not open automatically, open the CD with Windows Explorer (see page 8) to view the files and select ***SDLConnectSetup.exe***
2. Select the language you prefer for the installation process. This will NOT change the language in the SDL Connect program - only the language used for the setup procedure.
3. On the ***Select Destination*** screen - leave as is, click on ***Next***.



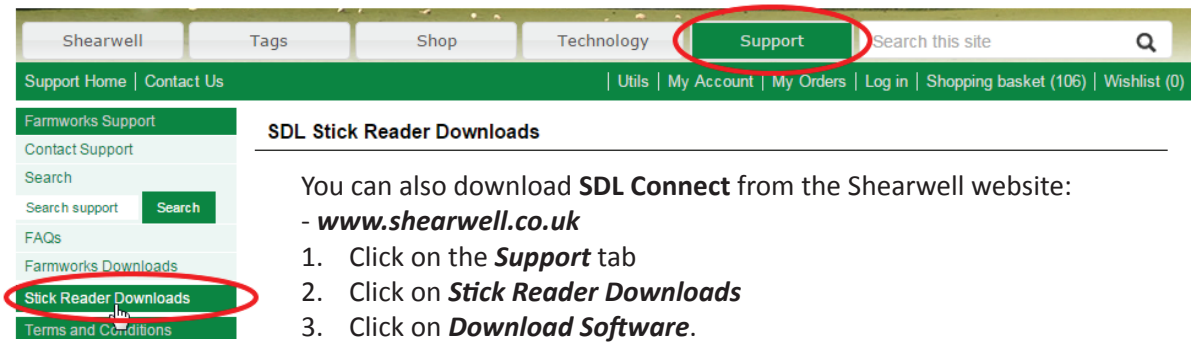


4. On the ***Ready to Install*** screen, click on ***Install***.


Setup - SDLConnect
Select Destination Location
Where should SDLConnect be installed?
Setup will install SDLConnect into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files (x86)\SDL Connect
Browse...
At least 7.3 MB of free disk space is required.
< Back
Next >
Cancel


Setup - SDLConnect
Ready to Install
Setup is now ready to begin installing SDLConnect on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files (x86)\SDL Connect
< Back
Install
Cancel

5. Click ***Finish*** to exit the setup program.
6. An ***SDL Connect*** icon is now on your computer desktop as a link to open the program.



You can also download **SDL Connect** from the Shearwell website:
- ***www.shearwell.co.uk***

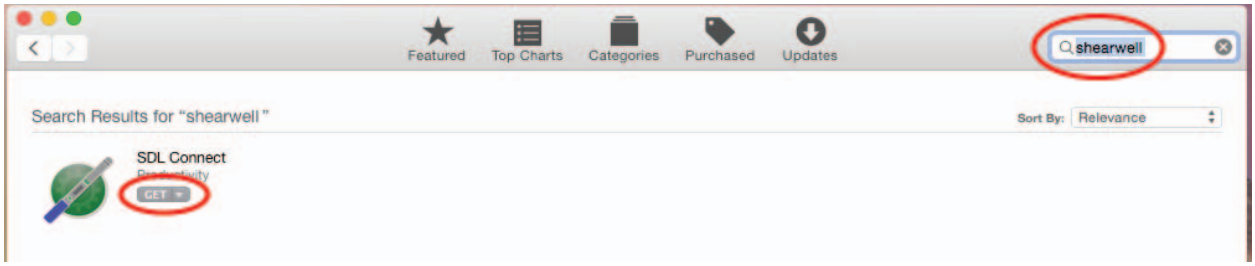
1. Click on the ***Support*** tab
2. Click on ***Stick Reader Downloads***
3. Click on ***Download Software***.

Install the software - Mac

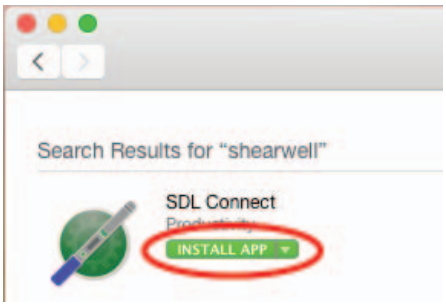
The software for connecting your stick reader to your computer is called **SDL Connect**. It works on Mac OS X 10.9 or later. The software allows you to transfer information between the stick reader and your computer. Being able to connect your stick reader to your computer is useful even if you are only planning to link your stick to a mobile printer. Changing configurations and keeping the date and time correct are all done through the computer software.
Note: Your stick reader must be fully charged to make a Bluetooth connection.

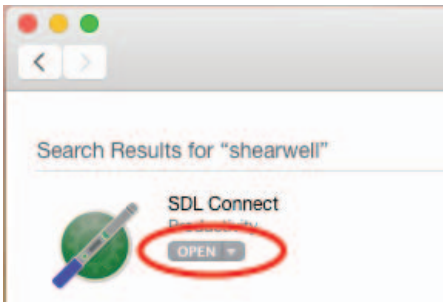
Install from the App Store

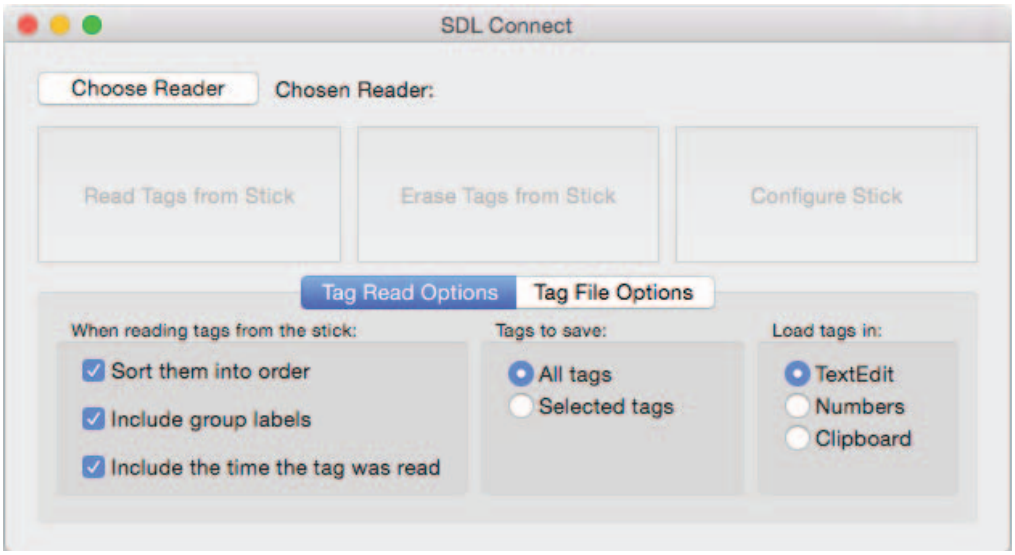
1. Click on the App Store icon to open.
2. In the search box type in ***Shearwell***. Hit the <***Enter***> key or click the magnifying glass icon to search.
3. Find ***SDL Connect*** in the search results. Click ***Get***.



4. Click ***Install App***.
5. Enter your Apple ID and password if prompted. The program will be installed on your computer.
6. Click ***Open*** to start using the program.







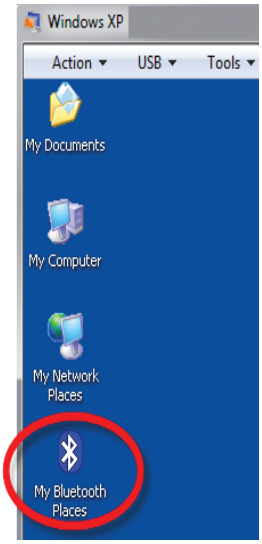
Make a Bluetooth connection - Windows

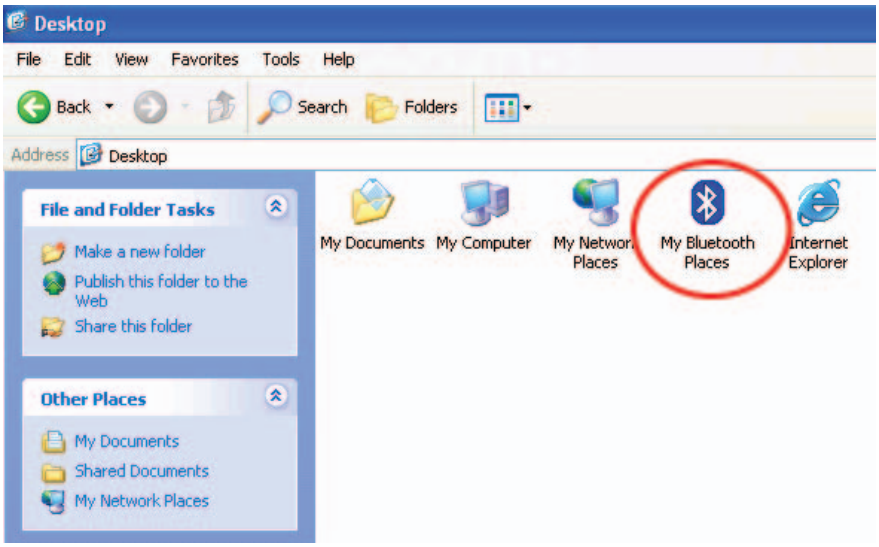
The stick reader must be recognized by your computer as a Bluetooth device. This is done by a variety of methods, depending on your computer's operating system. Follow the instructions for the operating system you will be using. *Note: Your stick reader must be fully charged to make a Bluetooth connection.*

Windows XP

Turn on the stick reader. Ensure the Bluetooth adapter is plugged into a USB port on your computer.

1. Navigate to a screen called ***My Bluetooth Places***. You can follow a link on your desktop or on the toolbar on the bottom, right-hand corner of your computer screen. You might also find ***My Bluetooth Places*** under My Computer.





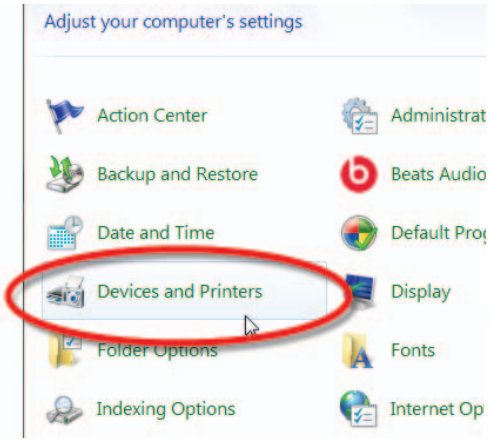
2. Open ***My Bluetooth Places***, then choose the option to ***Add a Bluetooth Device***.
3. The Bluetooth Setup Wizard will run - follow the prompts.
4. Your PC will start searching for Bluetooth signals. When it's finished scanning, the Bluetooth Device Selection screen will show a list of available devices.
5. Look on the back of your stick reader for a label with its Bluetooth name - it will start SDL400S, followed by another four digits. For example: SDL400S 1234

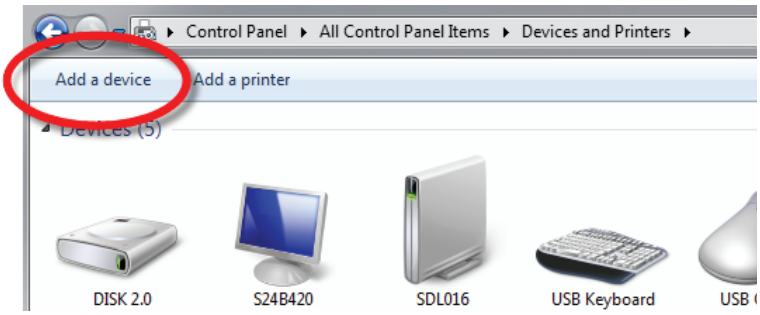
6. Find your stick reader's Bluetooth name on the Bluetooth Device Selection screen and select it. Click ***Next***.
7. On the next screen type in the passkey ***1111***. Click ***Finish***.
8. Select ***Connect*** on the Bluetooth Device Control. Make a note of the Serial (COM) port number which will be required when you connect to the stick reader software.
9. A shortcut to the Bluetooth Device Control is automatically created on your computer desktop for easy access in the future.

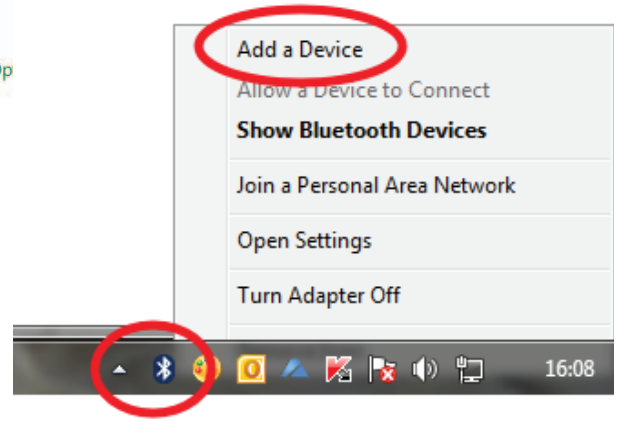
Make a Bluetooth connection - Windows

Windows 7, Windows 8 and Windows 10

1. Turn on the stick reader.
2. In the Control Panel open ***Devices and Printers***. Select ***Add a Device***. Or click the Bluetooth icon on the bottom right-hand corner of your computer screen and select ***Add a Device***.





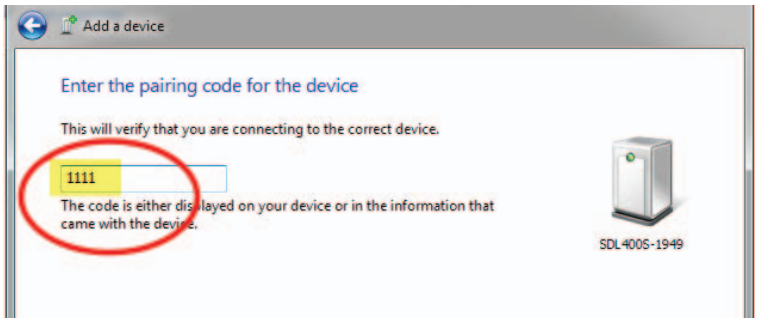


3. Your PC will start searching for Bluetooth signals. When it's finished scanning, the window will show a list of available devices.

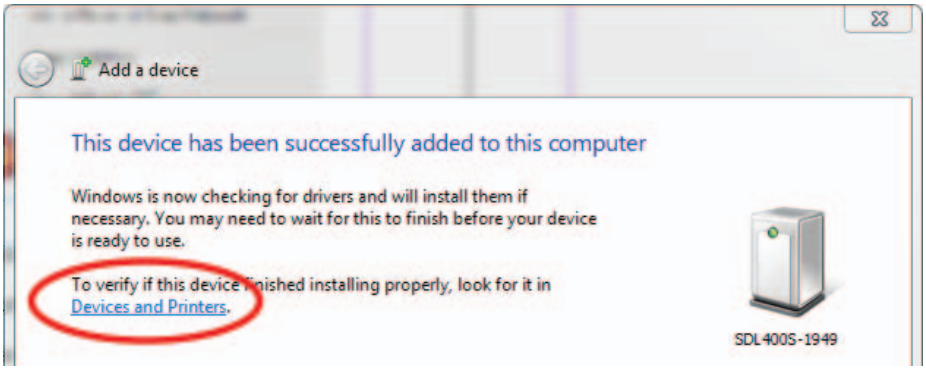
4. Look on the back of your stick reader for a label with its Bluetooth name - it will start SDL440S, followed by another four digits. For example: SDL400S 1234

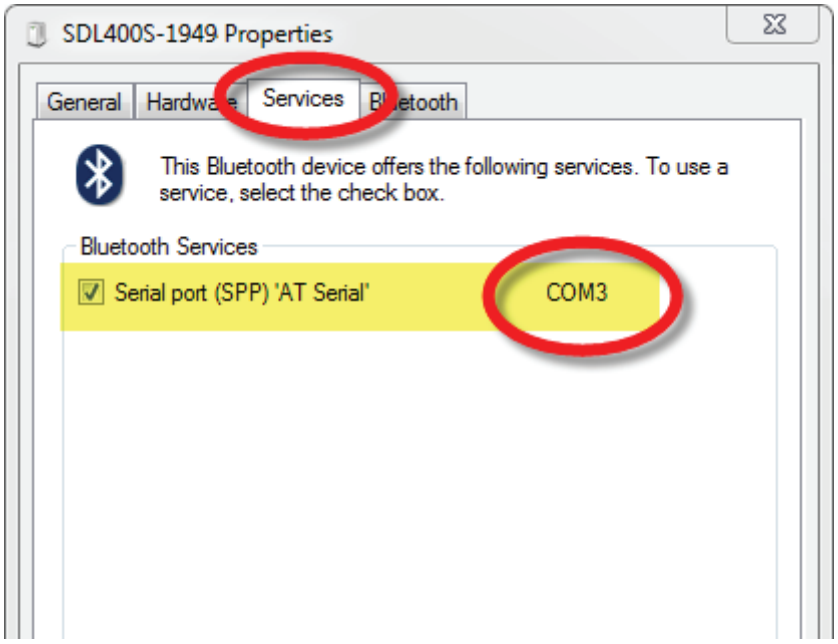
Make a Bluetooth connection - Windows

5. Find your stick reader's Bluetooth name on the screen and select it. Click ***Next***.
6. On the next screen type in the pairing code ***1111***. Click ***Next***.
7. Allow time for Windows to install the software drivers.


Add a device
Enter the pairing code for the device
This will verify that you are connecting to the correct device.
1111
The code is either displayed on your device or in the information that came with the device.
SDL400S-1949

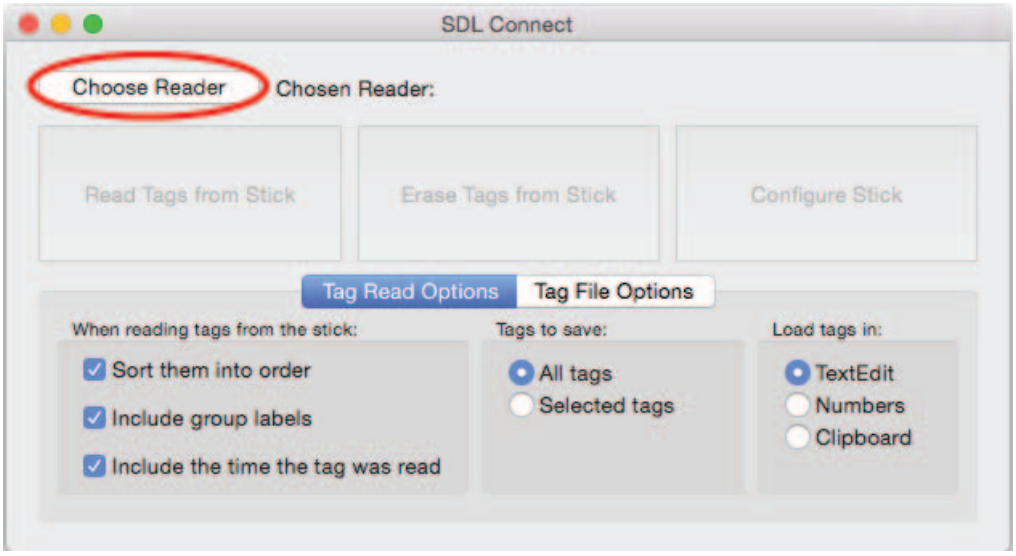
8. When the stick reader has been successfully installed click on the link to ***Devices and Printers***, or right click with your mouse on the SDL400 icon. Look on the ***Services*** tab. Make a note of the Serial (COM) port number which will be required when you connect to the stick reader software.


Add a device
This device has been successfully added to this computer
Windows is now checking for drivers and will install them if necessary. You may need to wait for this to finish before your device is ready to use.
To verify if this device finished installing properly, look for it in Devices and Printers.
SDL400S-1949



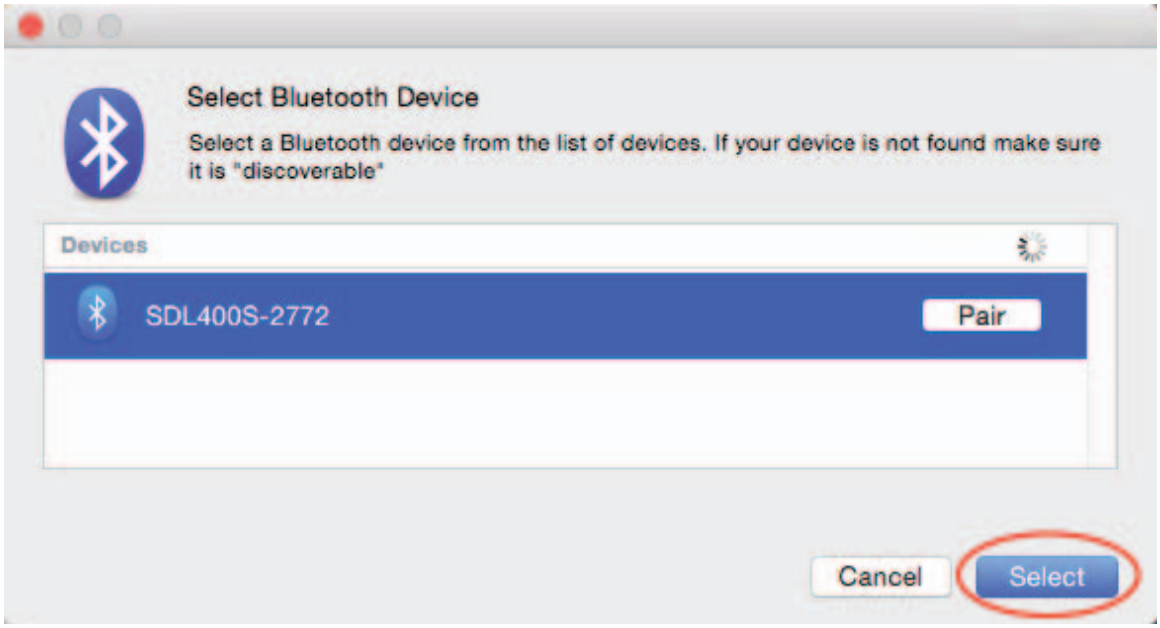
Make a Bluetooth connection - Mac

1. Turn on the stick reader.
2. Open ***SDL Connect*** on your computer.
3. Click on ***Choose Reader***.



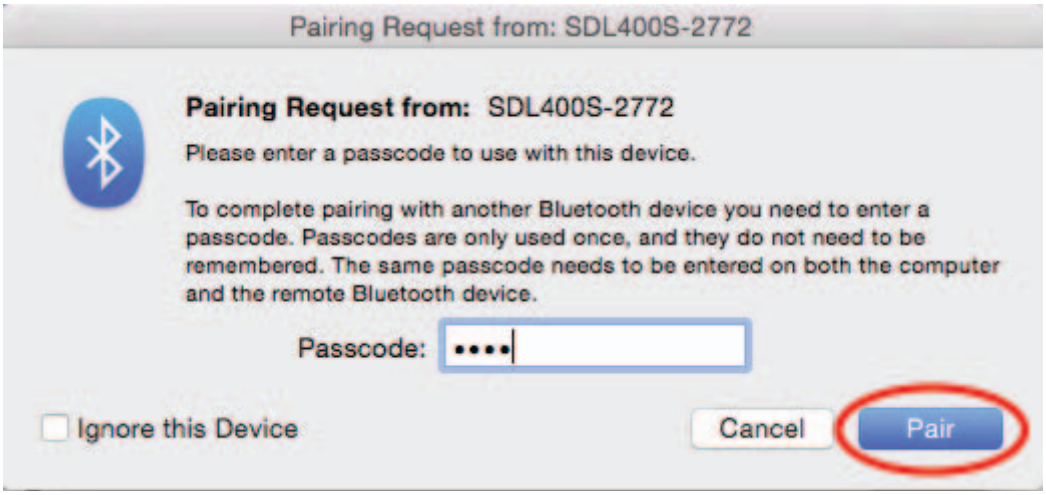
4. Look on the back of your stick reader for a label with its Bluetooth name - it will start SDL440S, followed by another four digits. For example: SDL440S 1234

5. Click on your stick reader's Bluetooth name on the screen. Click ***Select***.

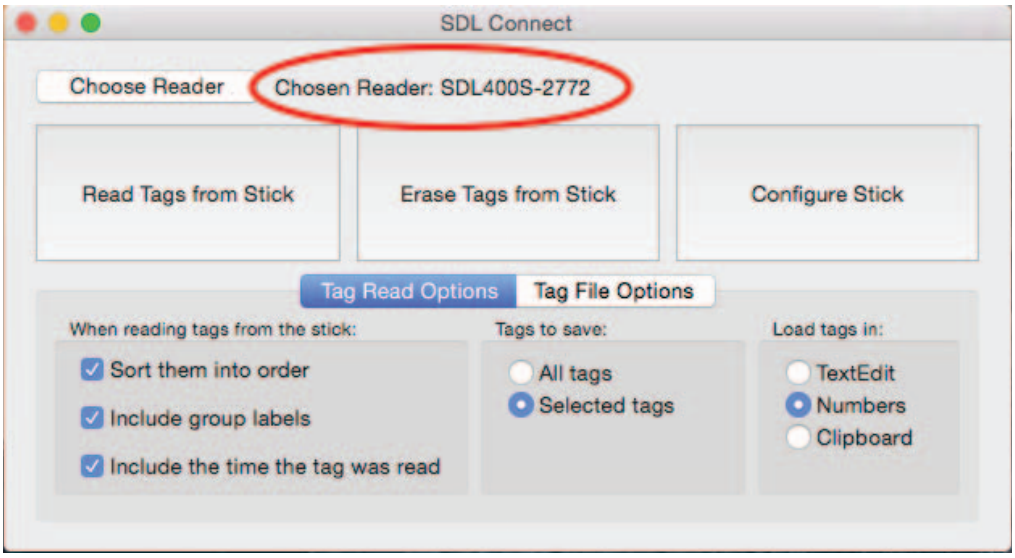

Select Bluetooth Device
Select a Bluetooth device from the list of devices. If your device is not found make sure it is "discoverable"
Devices
SDL400S-2772
Pair
Cancel
Select

Make a Bluetooth connection - Mac

1. If you are asked for a passcode type in 1111. Click ***Pair***.

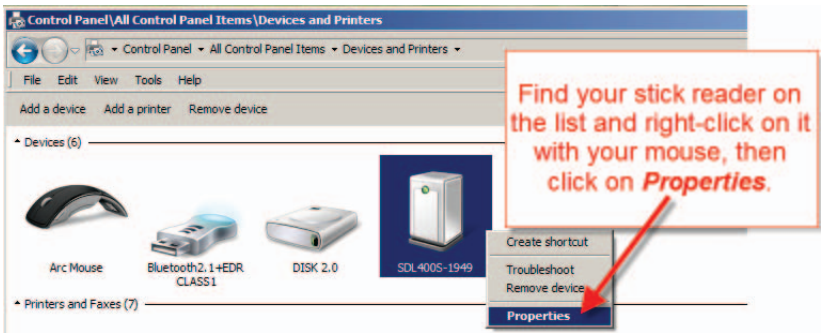

Pairing Request from: SDL400S-2772
Pairing Request from: SDL400S-2772
Please enter a passcode to use with this device.
To complete pairing with another Bluetooth device you need to enter a passcode. Passcodes are only used once, and they do not need to be remembered. The same passcode needs to be entered on both the computer and the remote Bluetooth device.
Passcode:
Ignore this Device
Cancel
Pair

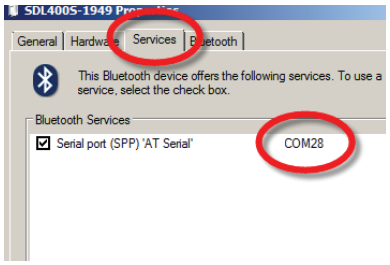
2. The stick reader connection will show on the **SDL Connect** screen.



Open SDL Connect - Windows

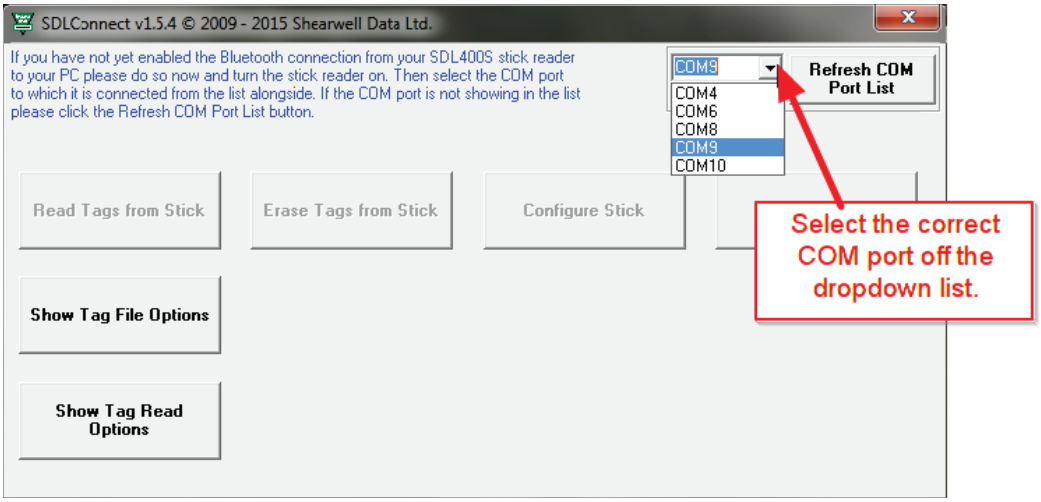
1. Switch on the stick reader and check the battery level is good. Establish the Bluetooth link with the computer before you open ***SDL Connect***.
2. If you forgot to record your COM port number earlier, go to ***Control Panel>Devices and Printers***. Find your stick reader's Bluetooth name on the list. Right-click with your mouse on the stick reader's name. Left click your mouse on ***Properties***. Look on the tab called ***Services*** to see the COM port number. Write it down!


Control Panel\All Control Panel Items\Devices and Printers
Control Panel ▸ All Control Panel Items ▸ Devices and Printers
File Edit View Tools Help
Add a device Add a printer Remove device
Devices (6)
Arc Mouse
Bluetooth2.1+EDR CLASS1
DISK 2.0
SDL400S-1949
Printers and Faxes (7)
Find your stick reader on the list and right-click on it with your mouse, then click on Properties.
Create shortcut
Troubleshoot
Remove device
Properties



3. Double-click the ***SDL Connect*** icon on your computer desktop to start. The software will open.

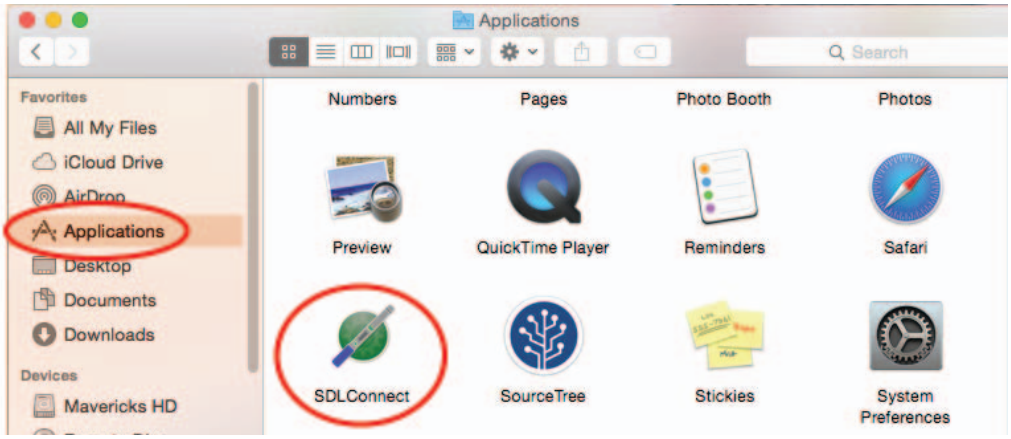
4. Click on the COM port dropdown list on the right side of the screen. Select the COM port number you recorded earlier. When a successful connection is made the buttons that were greyed out will become active. The stick reader software has now been successfully installed and you will not need to enter your COM port number again.


SDLConnect v1.5.4 © 2009 - 2015 Shearwell Data Ltd.
If you have not yet enabled the Bluetooth connection from your SDL400S stick reader to your PC please do so now and turn the stick reader on. Then select the COM port to which it is connected from the list alongside. If the COM port is not showing in the list please click the Refresh COM Port List button.
COM9
COM4
COM6
COM8
COM9
COM10
Refresh COM Port List
Read Tags from Stick
Erase Tags from Stick
Configure Stick
Show Tag File Options
Show Tag Read Options
Select the correct COM port off the dropdown list.

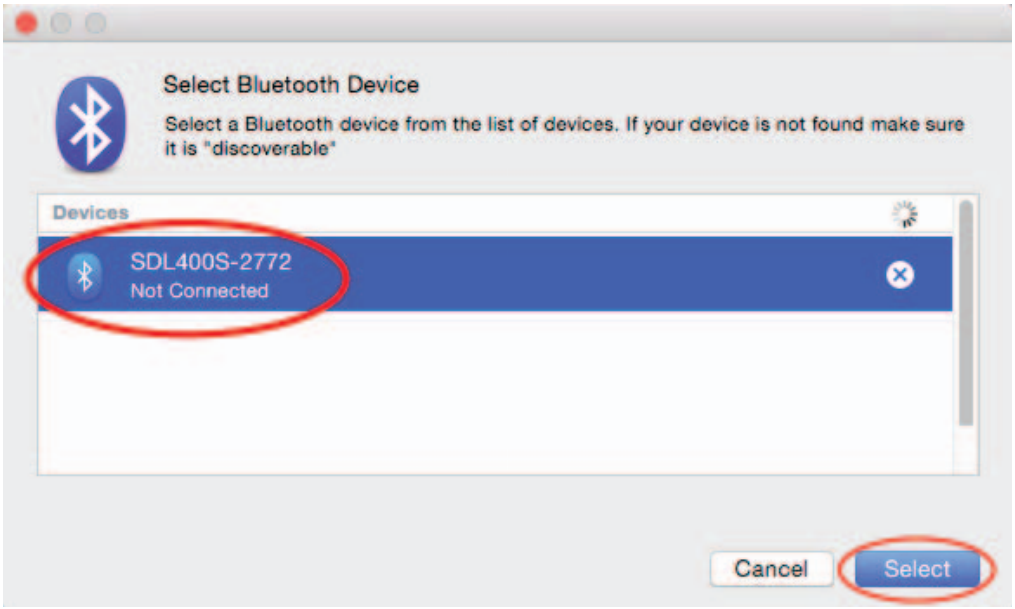
Open SDL Connect - Mac

1. Switch on the stick reader and check the battery level is good.
2. Click on the **SDL Connect** icon if there is a shortcut on your desktop.

3. If there is no desktop shortcut, open ***Finder,*** click on ***Applications*** and select **SDL Connect**.

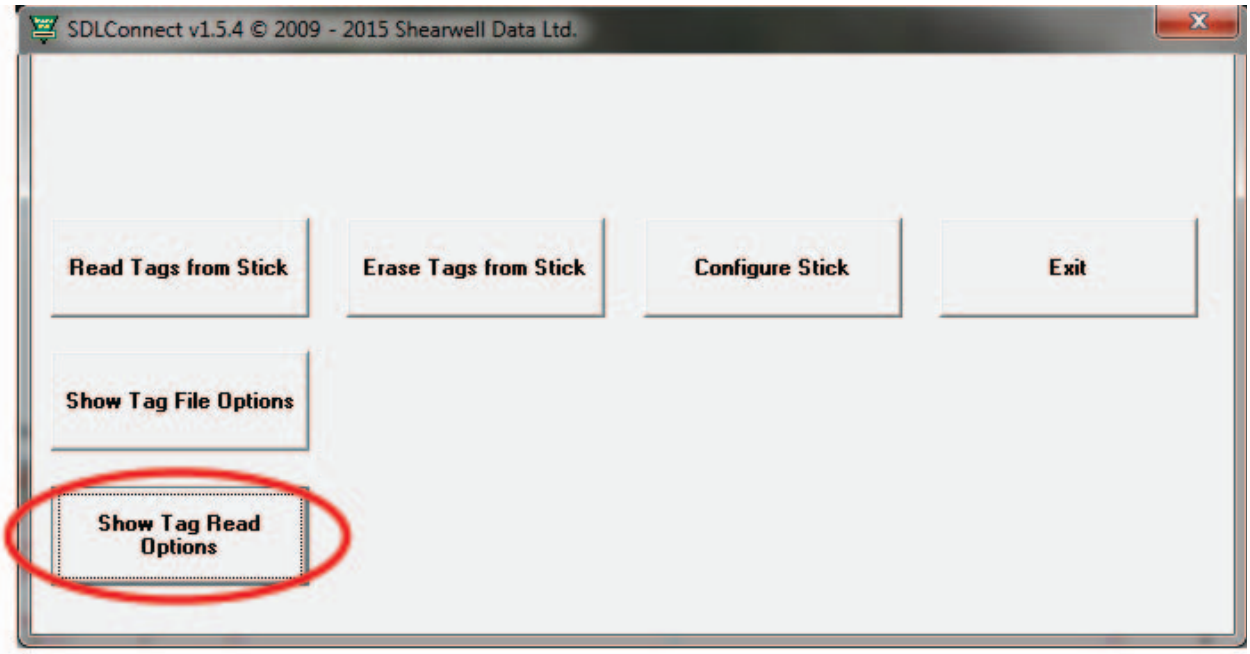


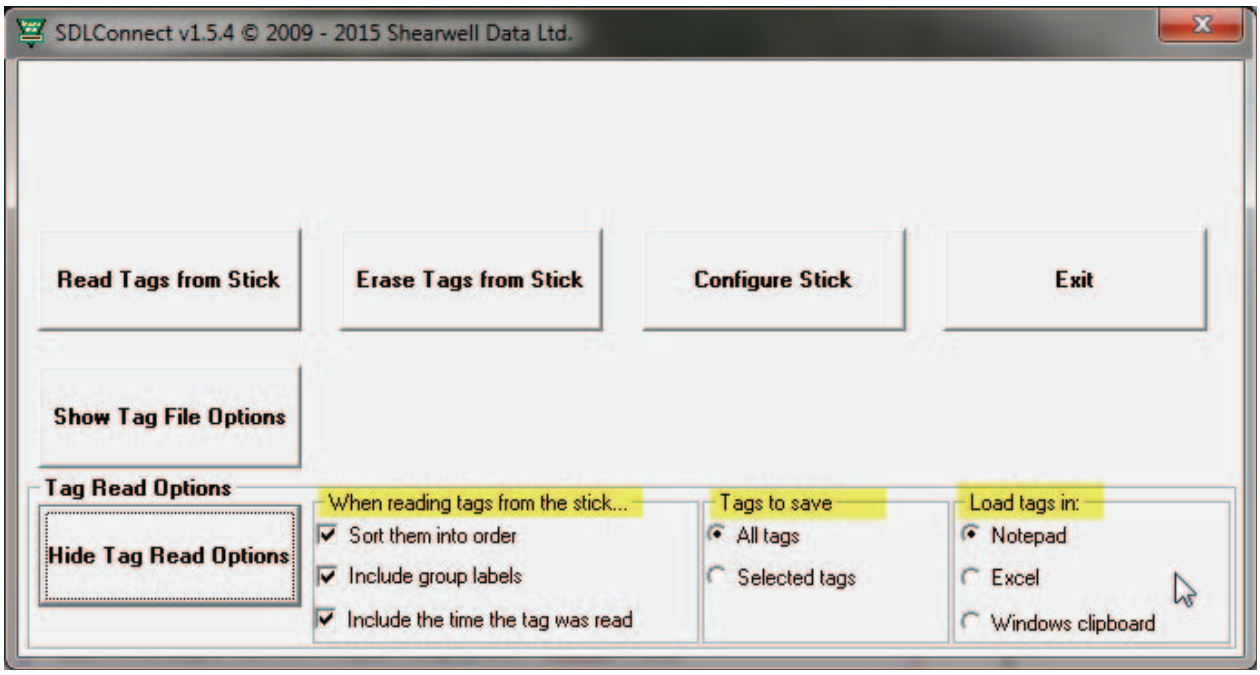
4. If your stick reader is not connected, highlight it and click ***Select***.



Options for downloading - Windows

EID numbers stored on the stick reader can be downloaded into your computer using the supplied software. Before you start, click on ***Show Tag Read Options*** to set your preferences. Click ***Hide Tag Read Options*** to close the option screen.


SDLConnect v1.5.4 © 2009 - 2015 Shearwell Data Ltd.
Read Tags from Stick
Erase Tags from Stick
Configure Stick
Exit
Show Tag File Options
Show Tag Read Options



Tag read options

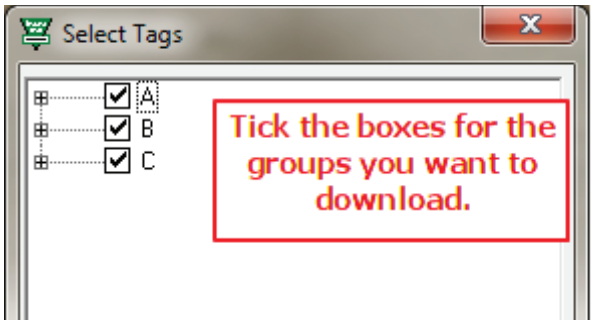
When reading tags from the stick...

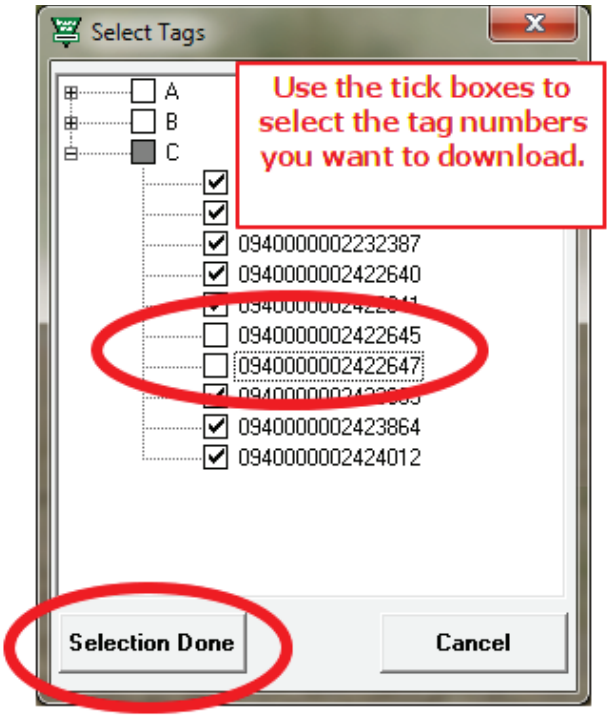
- ***Sort them into order*** means arranging the numbers from lowest to highest tag number.
- ***Include group labels*** means show the group (Ex. Group A, Group B, Group C, etc.).
- ***Include the time the tag was scanned*** means show the date and time each tag was scanned.

Options for downloading - Windows

Tags to save

- ***All tags from stick*** means show all the groups and all the tags.
- ***Selected tags from stick*** means you can select a specific group and then select which tag numbers in that group.

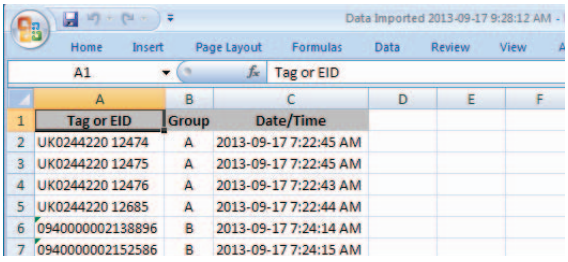




Load tags in:

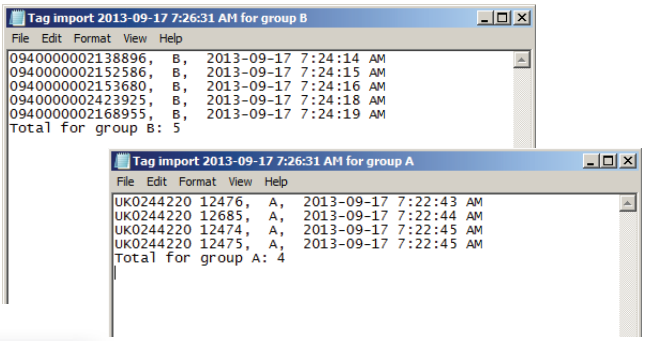
- ***Notepad*** means a text file that can also be saved as a CSV (comma separated values) file that is easily imported into a spreadsheet or a database application.
- ***Excel*** means as a spreadsheet in Microsoft Excel. *Note: The program detects whether Excel is installed on your computer. If it is not installed then Notepad is the default.*
- ***Windows Clipboard*** means the selected tag numbers are copied and ready to paste into a holding register or animal movement document, such as for the NLMD-LT or the Animal Reporting and Movement Service (ARAMS). Numbers on the clipboard can be pasted into any Windows program.

MS Excel format

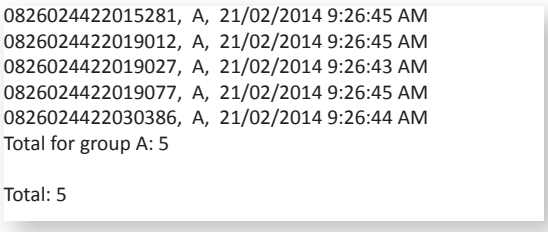


	A	B	C	D	E	F
1	Tag or EID	Group	Date/Time			
2	UK0244220 12474	A	2013-09-17 7:22:45 AM			
3	UK0244220 12475	A	2013-09-17 7:22:45 AM			
4	UK0244220 12476	A	2013-09-17 7:22:43 AM			
5	UK0244220 12685	A	2013-09-17 7:22:44 AM			
6	0940000002138896	B	2013-09-17 7:24:14 AM			
7	0940000002152586	B	2013-09-17 7:24:15 AM			

Notepad format



Windows clipboard format



Download tag numbers - Windows

Download EID numbers

1. Turn on the stick reader and ensure it has a Bluetooth link to your computer.
2. Click on the ***SDL Connect*** shortcut icon on your desktop. The software will open and the blue light on the stick reader will flash as they connect.
3. Select options for downloading by clicking on the ***Show Tag Read Options*** button.
4. Click ***Read Tags from Stick***.
5. If viewing the numbers in an Excel or Notepad format you can save the data. Go to ***File > Save As***, name the file and select a location.

Erase tag numbers from the stick reader

Downloading tags into the computer does not remove the numbers from the stick reader's memory. To erase tags, you can click on the ***Erase Tags*** button, and then click ***Yes*** to confirm. You can also erase tags on the stick reader itself - select ***Erase Tags*** as a menu option when you turn on the stick reader.

SDLConnect v1.5.4 © 2009 - 2015 Shearwell Data Ltd.
Read Tags from Stick
Erase Tags from Stick
Configure Stick
Exit
Show Tag File Options
Show Tag Read Options

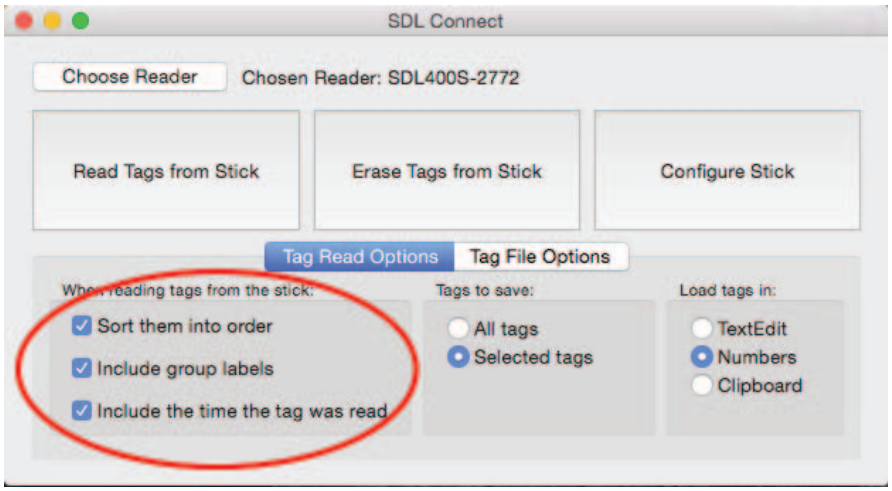
Options for downloading - Mac

EID numbers stored on the stick reader can be downloaded into your computer using ***SDL Connect***. Before you start click on ***Tag Read Options*** to set your preferences.

Tag read options

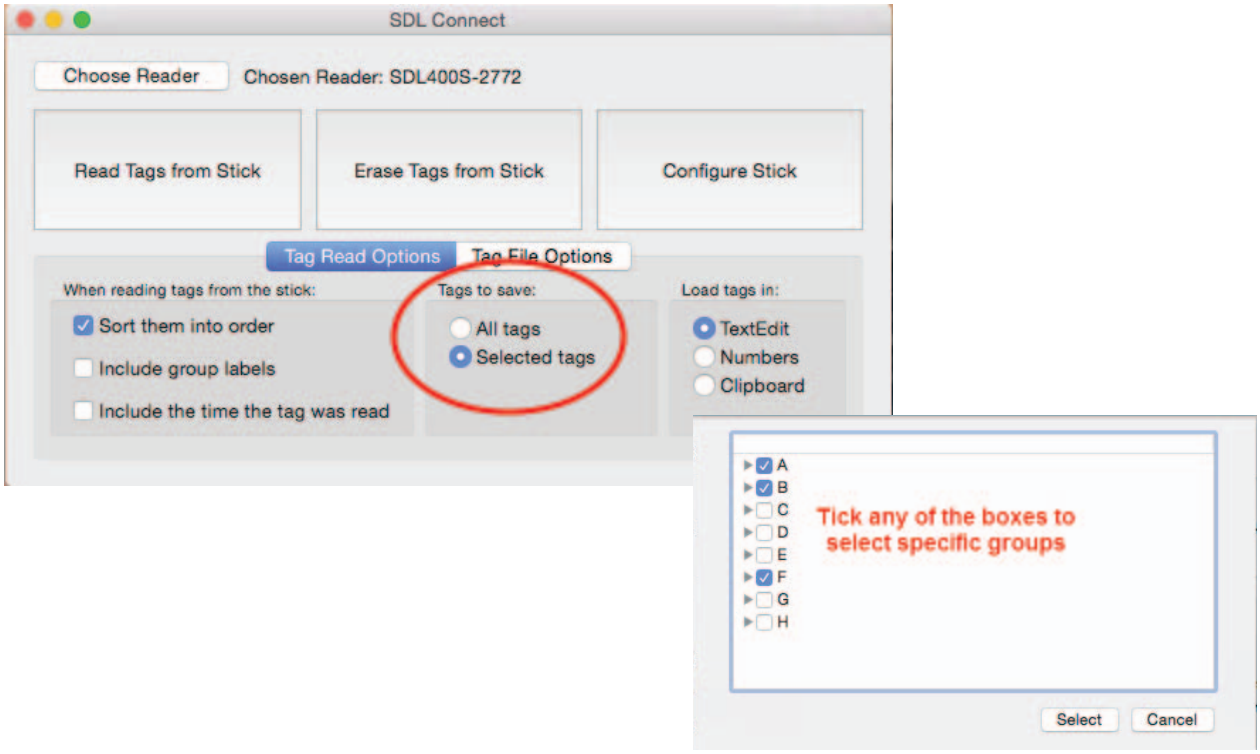
When reading tags from the stick...

- ***Sort them into order*** means arranging the numbers from lowest to highest tag number.
- ***Include group labels*** means show the group (Ex. Group A, Group B, Group C, etc.).
- ***Include the time the tag was scanned*** means show the date and time each tag was scanned.



Tags to save

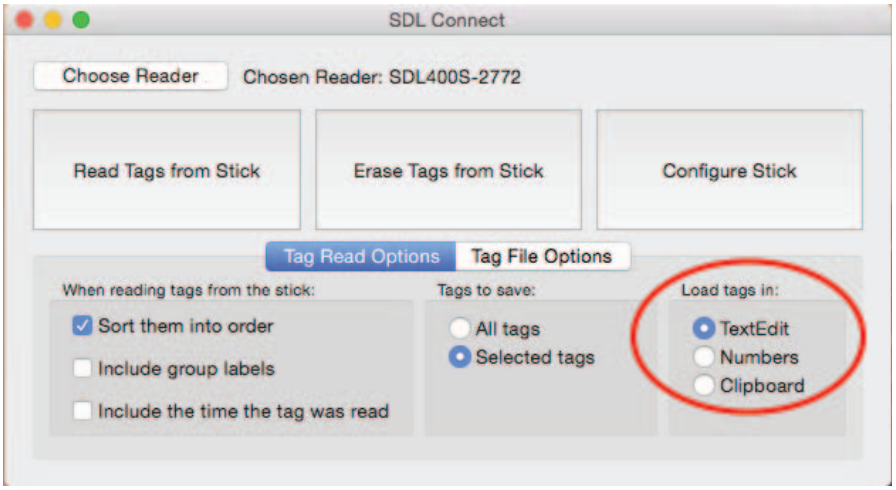
- ***All tags from stick*** means show all the groups and all the tags.
- ***Selected tags from stick*** means you can select a specific group, open the group, and then select individual tag numbers in that group.



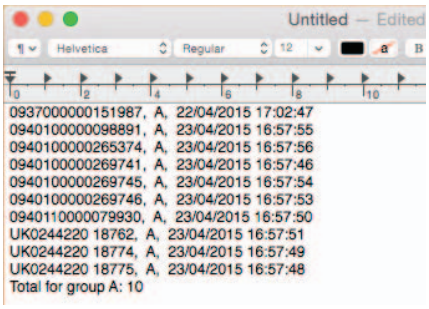
Options for downloading - Mac

Load tags in:

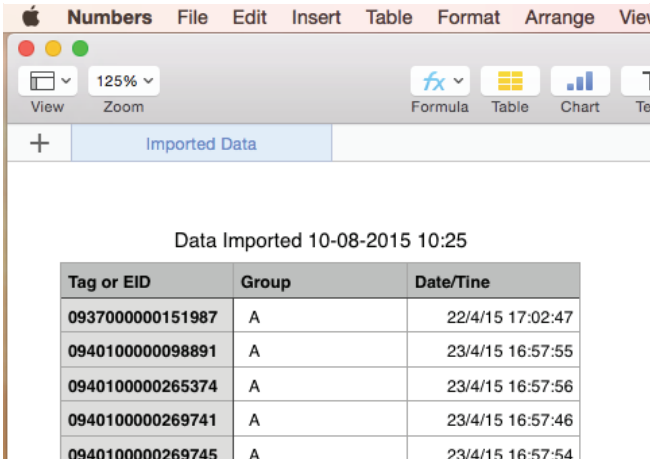
- ***TextEdit*** means a text file that can also be saved as a CSV (comma separated values) file that is easily imported into a spreadsheet or a database application.
- ***Numbers*** means as a spreadsheet in iWorks. *Note: The program detects whether Numbers is installed on your computer. If it is not installed then TextEdit is the default.*
- ***Clipboard*** means the selected tag numbers are copied and ready to paste into a holding register or animal movement document. Numbers on the clipboard can be pasted into another program.



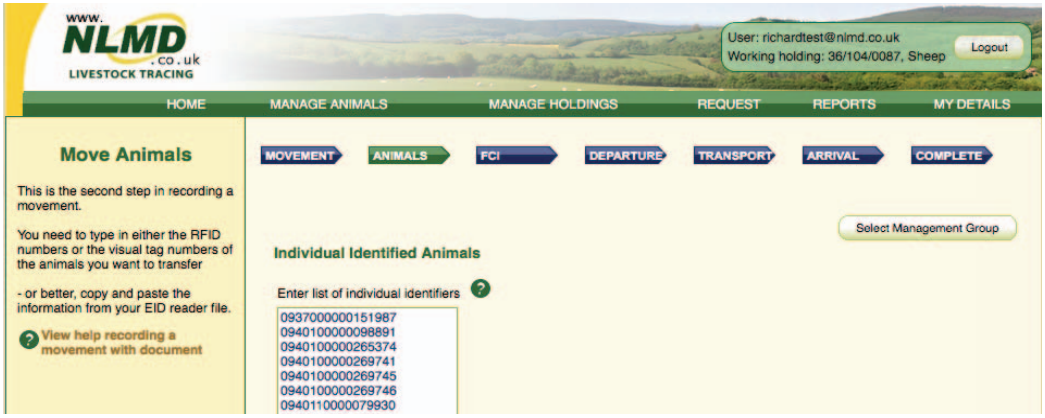
TextEdit format



Numbers format



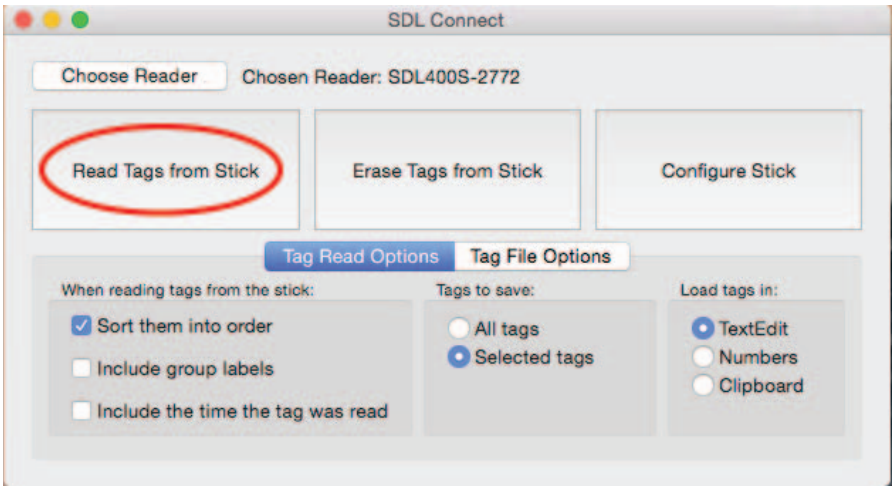
Clipboard format - paste into other programs



Download tags numbers - Mac

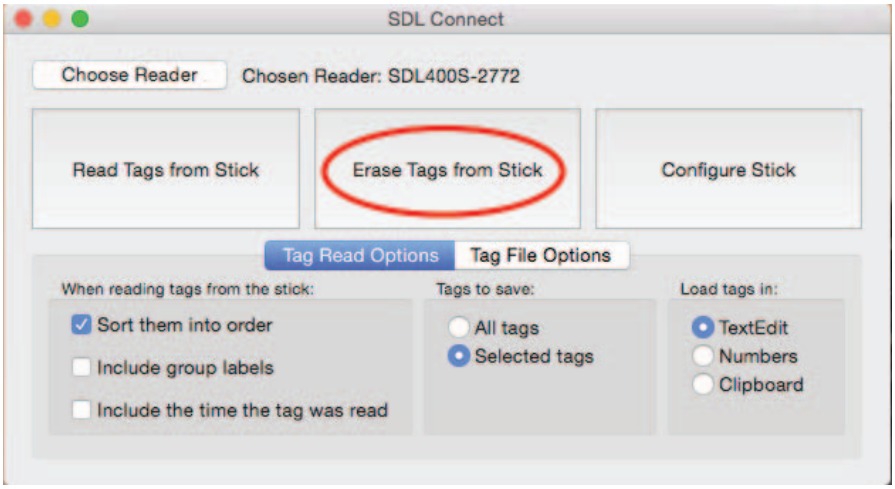
Download EID numbers

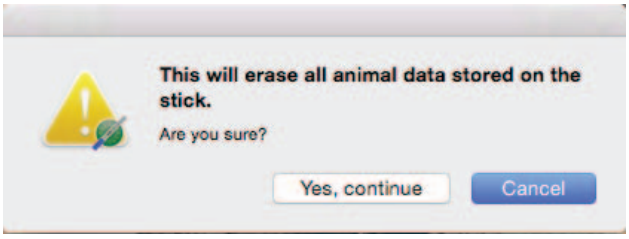
1. Turn on the stick reader and ensure it has a Bluetooth link to your computer.
2. Click on the ***SDL Connect*** shortcut icon on your desktop to open the software.
3. Select options for downloading by clicking on the ***Tag Read Options*** button.
4. Click ***Read Tags from Stick***.
5. If viewing the numbers in a TextEdit or Numbers format you can save the data. Go to ***File > Save As***, name the file and select a location.



Erase tag numbers from the stick reader

Downloading tags into the computer does not remove the numbers from the stick reader's memory. To erase tags, you can click on the ***Erase Tags*** button, and then click ***Yes*** to confirm. You can also erase tags on the stick reader itself - select ***Erase Tags*** as a menu option when you turn on the stick reader.



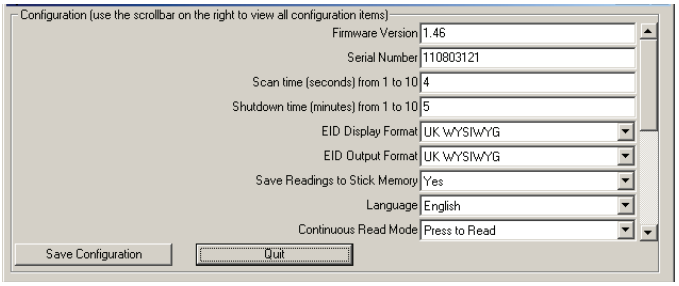


Configure the stick reader - Windows

To save your changes click on ***Save Configuration***. To cancel and exit click on ***Quit***.

Firmware Version
This is the current software version number on the stick reader.

Serial Number
This is the stick reader's serial number. This is also printed on the Shearwell label on the back of the stick reader.


Configuration (use the scrollbar on the right to view all configuration items)
Firmware Version 1.46
Serial Number 110803121
Scan time (seconds) from 1 to 10 4
Shutdown time (minutes) from 1 to 10 5
EID Display Format UK WYSIWYG
EID Output Format UK WYSIWYG
Save Readings to Stick Memory Yes
Language English
Continuous Read Mode Press to Read
Save Configuration
Quit

Scan time (seconds) from 1 to 10
This is the length of time the stick reader will search for an EID tag before giving a failed read signal. Type in a scan time from 1 to 10 seconds. The default time is 4 seconds.

Shutdown Time (minutes) from 1 to 10
This is the length of time the stick reader will be inactive before it shuts off automatically. Type in a shut-down time from 1 to 10 minutes. The default time is 5 minutes.

EID Display Format
This is how EID numbers are shown on the stick reader's display screen. This also controls how EID numbers will appear in print-outs. ***Tag Lookup*** is the format when a tag (bucket) file is loaded. For more information see page 22 - ***Tag File Options*** and page 26 - ***EID Options***.

EID Output Format
This is the format for information the stick reader sends to any connected Bluetooth device, such as a printer or weigh head. Instructions for linking those devices will indicate what format they require. ***Tag Lookup*** is the format when a tag (bucket) file is loaded. For more information see page 22 - ***Tag File Options*** and page 26 - ***EID Options***.

Save Readings to Stick Memory
This is the same as ***Disable Memory*** on the stick reader menu. Select ***No*** to disable the memory; select ***Yes*** to enable the memory.

Language
Select a language for the display. The computer must also have the ***Control Panel > Region and Language*** options set to the same language.

Continuous Read Mode
This is the same as the Rapid Read option on the stick reader's menu. The stick reader will scan continuously for EID tags without the user pushing the green button for each animal. If no tags are found, the stick reader will stop scanning after 12 seconds. ***Press to Read*** means the stick reader scans for a tag only when the green button is pushed; when a tag is read the green button must be pushed again to scan for another tag.

Continuous Read Timeout (seconds) 1 to 30
This is the length of time the stick reader will scan for tags in Continuous Read mode. If no tags are detect-ed in this time then the stick reader will give a long beep and stop scanning. The default time is 12 seconds. Type in a scan time from 1 to 30 seconds.

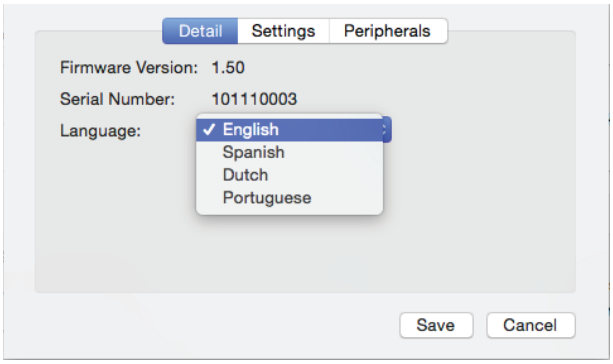
For printer options see page 26 - ***Link to a Mobile Printer.***

Configure the stick reader - Mac

Details

Firmware Version

This is the current software version number on the stick reader.



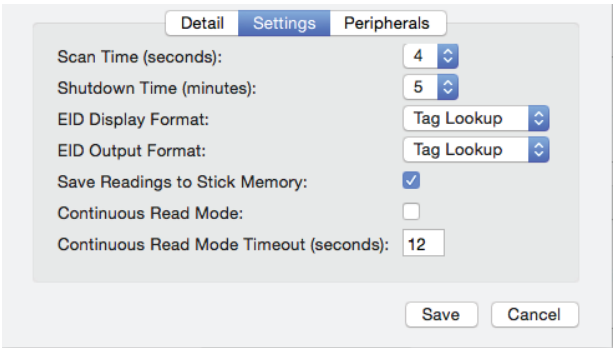
Serial Number

This is the stick reader's serial number. This is also printed on the Shearwell label on the back of the stick reader.

Language

This will set the language on the stick reader screen.

Settings



Scan time (seconds) from 1 to 10

This is the length of time the stick reader will search for an EID tag before giving a failed read signal. Type in a scan time from 1 to 10 seconds. The default time is 4 seconds.

Shutdown Time (minutes) from 1 to 10

This is the length of time the stick reader will be inactive before it shuts off automatically. Type in a shutdown time from 1 to 10 minutes. The default time is 5 minutes.

EID Display Format

This is how EID numbers are shown on the stick reader's display screen. This also controls how EID numbers will appear in print-outs. ***Tag Lookup*** is the format when a tag (bucket) file is loaded. For more information see page 22 - ***Tag File Options*** and page 26 - ***EID Options***.

EID Output Format

This is the format for information the stick reader sends to any connected Bluetooth device, such as a printer or weigh head. Instructions for linking those devices will indicate what format they require. ***Tag Lookup*** is the format when a tag (bucket) file is loaded. For more information see page 20 - ***Tag File Options*** and or ***EID Options*** in the Windows manual.

Save Readings to Stick Memory

This is the same as ***Disable Memory*** on the stick reader menu. Select ***No*** to disable the memory; select ***Yes*** to enable the memory.

Continuous Read Mode

This is the same as the Rapid Read option on the stick reader's menu. The stick reader will scan continuously for EID tags without the user pushing the green button for each animal. If no tags are found, the stick reader will stop scanning after 12 seconds.

Continuous Read Timeout (seconds) 1 to 30

This is the length of time the stick reader will scan for tags in Continuous Read mode. If no tags are detected in this time then the stick reader will give a long beep and stop scanning. The default time is 12 seconds. Type in a scan time from 1 to 30 seconds.

Link to a mobile printer

The stick reader is fully compatible with a thermal Bluetooth printer. The mobile printer recommended and supplied by Shearwell is an Able Systems AP1300BT.

Printer on and off
Press the power button once to turn the printer on. The printer turns itself off automatically if it has not been used for a few minutes. You can turn the printer off manually by opening the cover and double-clicking the power button.

Battery charging
The battery can be recharged using either the mains charger or the car charger supplied. Charging the printer battery from flat to full should take about three hours.

Indicator light
Steady green = Normal operation
Long green, short red = Battery is low
Short green, long orange = Battery charging
Blinking red = Error

WARNING: *Use the correct adapter for charging the printer. Do not confuse the stick reader battery chargers with the printer chargers. The mains and car charger for the printer are labelled* ***Printer Charger.***

Paper roll installation
To insert a new roll of paper, slide the catch down and away from the paper slot. The cover for the paper container will release and open. Remove the old paper core and insert a new roll of paper.

Link to a mobile printer

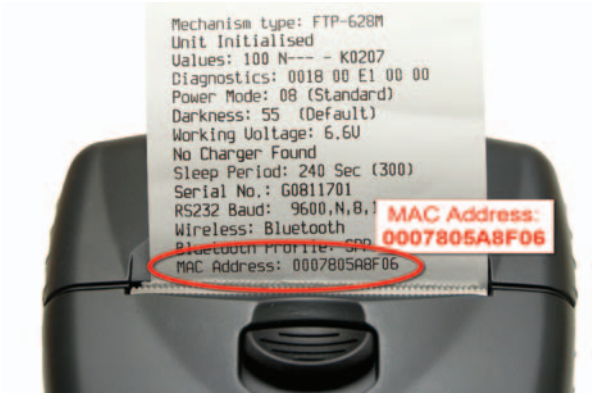
Printer and stick reader combination

When a stick reader and printer are purchased as a bundle they will come from Shearwell with the Bluetooth link already established. A label on the underside of the printer confirms your stick reader is linked. Print options will not be displayed on your stick reader's menu if it is not linked to a printer.

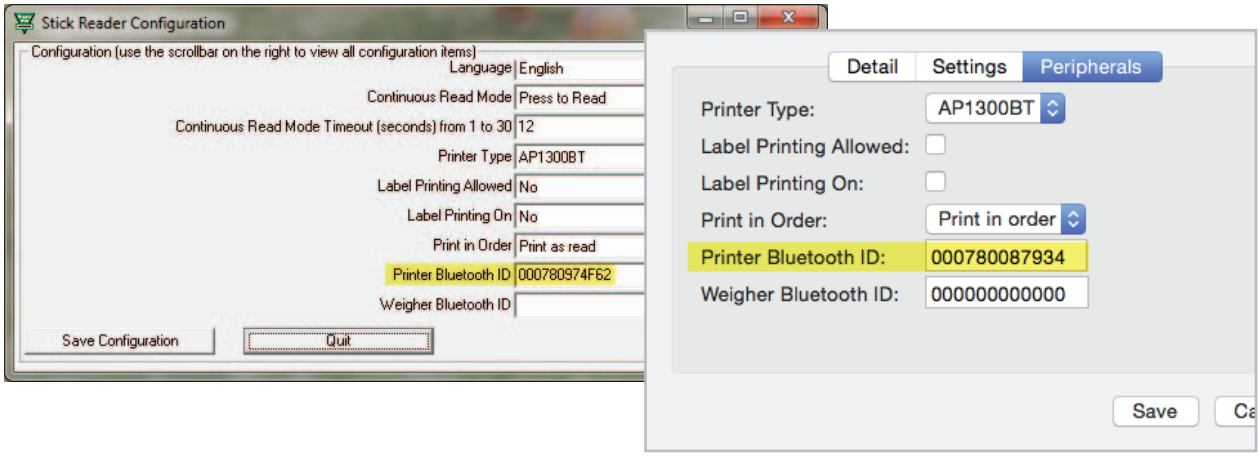
New connections

To establish a new printer link, or if you wish to link an existing printer to an alternative stick reader, you must have already completed the earlier steps for installing Bluetooth and the stick reader software on your computer. (See pages 8 to 12.) Once the stick reader is linked to the software on the computer a new connection to the printer is made through the ***Configure Stick*** screen on the PC.

1. Turn on the stick reader.
2. Open the SDL Connect software. Click on ***Configure Stick***.
3. For a Windows computer, scroll down to find the ***Printer Type*** field. Select AP1300BT.
4. For a Mac computer, click ***Configure stick > Peripherals***

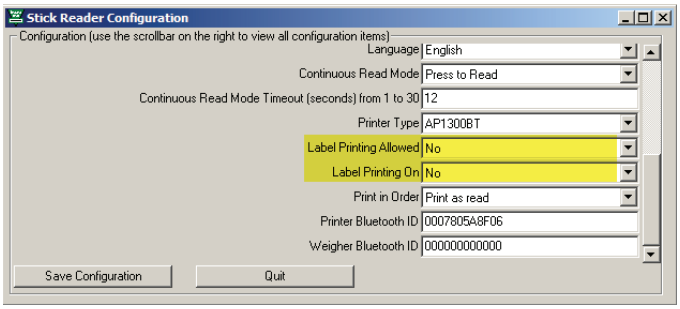


5. Turn on the printer by pressing the power button. The indicator light will glow green.
6. Press and release the power button twice, in quick succession. This will cause the printer to print out a test strip.
7. On the test strip, find the MAC Address. This 12 character code is the printer's Bluetooth ID.
8. On the ***Configure Stick*** screen on the computer find the field ***Printer Bluetooth ID*** and type in the MAC Address from the test strip.
9. Click ***Save Configuration***. The blue light on the stick reader will flash as the two connect.



Configure printer options - Windows

The ***Configure Stick*** window on your Windows computer software includes many of the same options as the menu on the stick reader. To save your changes click on ***Save Configuration***. To cancel and exit click on ***Quit***.



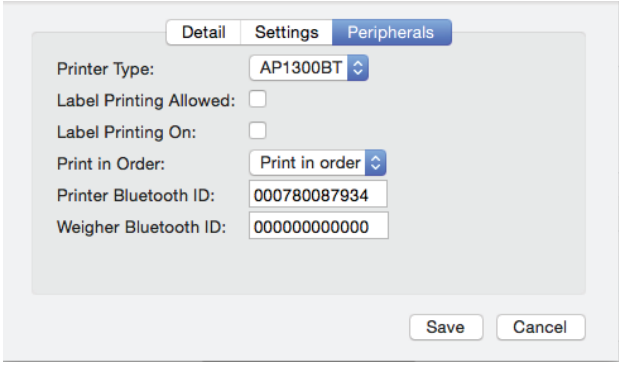
Label Printing Allowed
The ***Print label*** menu option is only available on the stick reader when the ***Configure Stick*** option is set to ***Yes***.
Label printing is a specialized function so the default is set to ***No***.

Label Printer On
If Label Printing is allowed, then the actual label printing function can be turned on or off by selecting ***Yes*** or ***No***. This option activates the Bluetooth printer after each animal is scanned - a label of each EID number is printed after each tag is read.

Print in Order
EID numbers will be printed in numerical order.
Please note: Printing will be slower when this is selected.
Please note: ***Print Order*** does not work if the EID display option is set to ***Tag Lookup***.

Configure printer options - Mac

The ***Configure Stick*** window on your Mac computer software includes many of the same options as the menu on the stick reader. To save your changes click on ***Save***. To cancel and exit click on ***Cancel***.



Peripherals

Printer Type
The default setting is AP1300BT. This is the mobile Bluetooth printer supplied by Shearwell.

Label Printer Allowed
Label printing is a specialized function so the default setting is unticked.

Label Printer On
If Label Printing is allowed, then the actual label printing function can be turned on or off by selecting ***Yes*** or ***No***. This option activates the Bluetooth printer after each animal is scanned - a label of each EID number is printed after each tag is read.

Print in Order
EID numbers can be printed in numerical order or in the order the tags were read.
Note: Printing will be slower when ***Print in order*** is selected.
Note: ***Print in order*** does not work if the EID display option is set to ***Tag Lookup***.

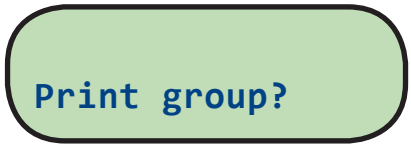
Printer Bluetooth ID
This is the MAC address of the Bluetooth printer you want to link to your stick reader. See page 27 for how to find your printer's Mac address.

Print options on the stick reader

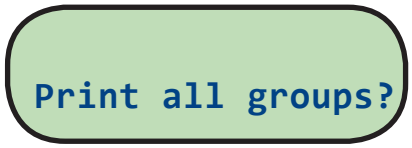
A stick reader linked to a mobile printer will display print options on the stick menu. The format of the EID numbers depends on the settings you choose on the ***Configure Stick*** program on the computer.

1. Turn on the printer and make sure there is sufficient paper loaded.
2. Turn on the stick reader by pressing and holding the green button to see all the menu options.
3. Release the button to make a selection from the menu.

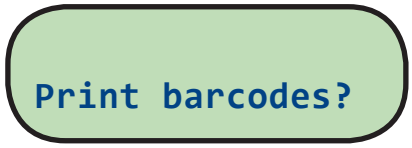
Print order on
EID numbers are printed in numerical order. To change back to print EID numbers in the order they were read select ***Print order off***.



Print Group
This prints all the EID numbers in the current group.



Print all groups
This prints all the EID numbers divided into groups.
No print out will be produced if Group A = 0 animals.



Print barcode
EIDs are shown as both numbers and barcodes.

Print labels
This option is only available when the stick reader is configured ***Label Printing Allowed***. After each animal is scanned the printer prints the EID number and the matching barcode. If the EID Format is set to Tag Lookup then that number will appear underneath the barcode.

EID Tag Formats

Definitions

WYSIWYG Tags
- “What You See Is What You Get”. A ‘WYSIWYG’ tag has an electronic number (EID) that is the same as the number printed on the outside of the tag.
- UK sheep born after Jan 1, 2010 must have an official WYSIWYG tag.
- “Slaughter tags” are also WYSIWYG, although only the flock mark is visible on the outside.

Non-WYSIWYG Tags
- A tag with an electronic number (EID) that is different than the number printed on the outside of the tag.
- A tag file is for non-WYSIWYG tags - a cross-reference between the EID inside the tag and the number printed on the outside.

Stick reader EID format options

Some countries and equipment manufacturers require EID numbers to be transmitted in a specific format. The SDL400S stick reader is able to transmit EID numbers in various formats. Changes to the EID format are made through the ***Configure Stick*** function on the computer software.

UK WYSIWYG (Sheep)
- Displays UK, followed by a space and the 7-digit flock number, followed by a space and the 5-digit individual animal number.
- The stick reader set to UK WYSIWYG will display non-UK tags in decimal format.

Decimal
Displays the full 16-digit EID number

Tag Lookup
- Used with a tag file for non-WYSIWYG tags.
- The EID number programmed into the tag microchip is cross referenced to another number that will be displayed when the tag is scanned.

ISO Decimal
- The EID number is shown, minus the first 0 of the country code and with a space between the country code and the remaining 12 digits.

Full ISO
- The screen will alternate between the 15-digit EID number and six additional digits that are the retag counter, the species identifier and three reserved digits.

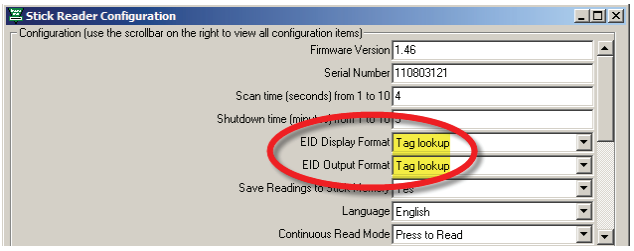
Hexadecimal
- All the information on the microchip are displayed in hexadecimal on screen , including the retag counter, species identifier and the three reserved digits.

Working with tag files - Windows

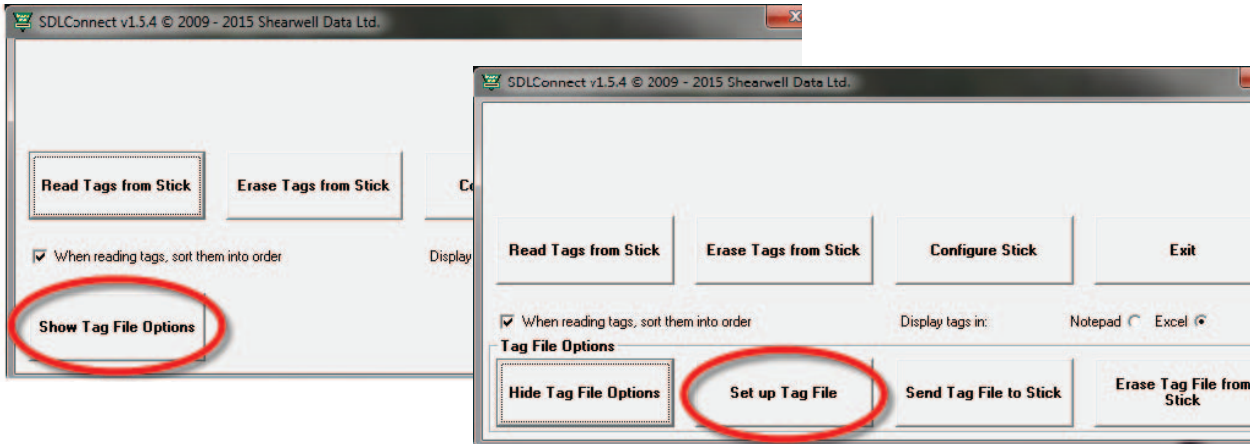
- A 'WYSIWYG' tag has an electronic number (EID) that is the same as the number printed on the outside of the tag.
- A 'non-WYSIWYG' tag has an electronic number (EID) that is different than the number printed on the outside of the tag.
- A tag file is for non-WYSIWYG tags - a cross-reference between the EID inside the tag and the number printed on the outside.
- A tag file loaded into the stick reader software allows the stick reader to display the outside number instead of the internal EID number. Your tag manufacturer will supply this file for you when you purchase non-WYSIWYG tags. Learn more about EID and tag formats on page 22 - ***EID Options***

To load a tag file onto your stick reader:

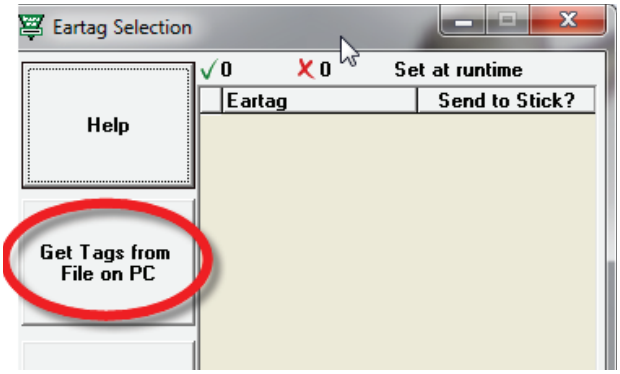
1. Turn on the stick reader.
2. Open ***SDL Connect*** on your computer desktop. Click on ***Configure Stick***.
3. Change EID Display Format to ***Tag Lookup***.
4. Change EID Output Format to ***Tag Lookup***.
5. Click ***Save Configuration*** and ***Quit***.


Stick Reader Configuration
Configuration (use the scrollbar on the right to view all configuration items)
Firmware Version 1.46
Serial Number 110803121
Scan time (seconds) from 1 to 10 4
EID Display Format Tag lookup
EID Output Format Tag lookup
Language English
Continuous Read Mode Press to Read

***Note**: The stick reader will still read and print WYSIWYG tag numbers even when it is configured for a tag file and the format is set to Tag Lookup.*


SDLConnect v1.5.4 © 2009 - 2015 Shearwell Data Ltd.
Read Tags from Stick
Erase Tags from Stick
When reading tags, sort them into order
Show Tag File Options
SDLConnect v1.5.4 © 2009 - 2015 Shearwell Data Ltd.
Read Tags from Stick
Erase Tags from Stick
Configure Stick
Exit
When reading tags, sort them into order
Display tags in:
Notepad
Excel
Tag File Options
Hide Tag File Options
Set up Tag File
Send Tag File to Stick
Erase Tag File from Stick

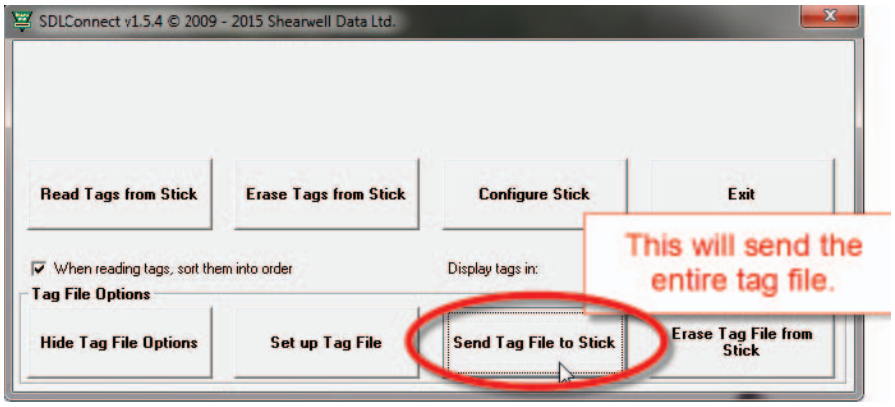
6. The tag file provided by your tag supplier must be saved on your computer.
7. Click on the ***Tag File Options*** button.
8. Select ***Set up Tag File***.
9. Select ***Get Tags from File on PC***. Find the tag file from your tag manufacturer - accepted tag formats are Shearwell, Allflex and FarmPlan. For all others please check with Shearwell Support.
10. If you do not have a tag file you can make your own text file in Notepad. Call Shearwell Support for more information.

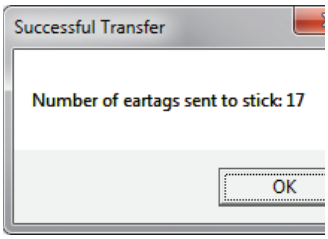


Working with tag files - Windows

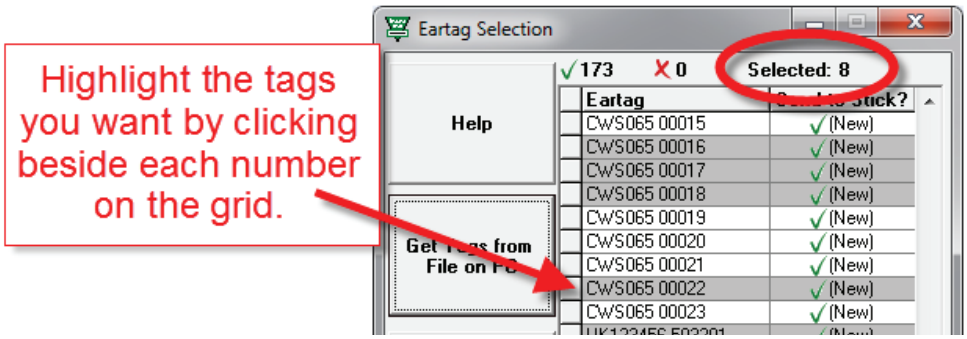
Select tags to send to the stick reader

1. The tag file will open with two columns of information. The eartag column shows the name/number that will be displayed when the tag is scanned by the stick reader.
2. The ***Send to Stick*** column displays a green tick and ***(New)*** besides each name/number. ***(New)*** means the number has not previously been sent to the stick reader.
3. If you wish to send the entire list of tags to the stick reader click ***Save & Exit***.
4. Click on the ***Send Tag File to Stick*** button. A confirmation screen will display the number of tags exported.

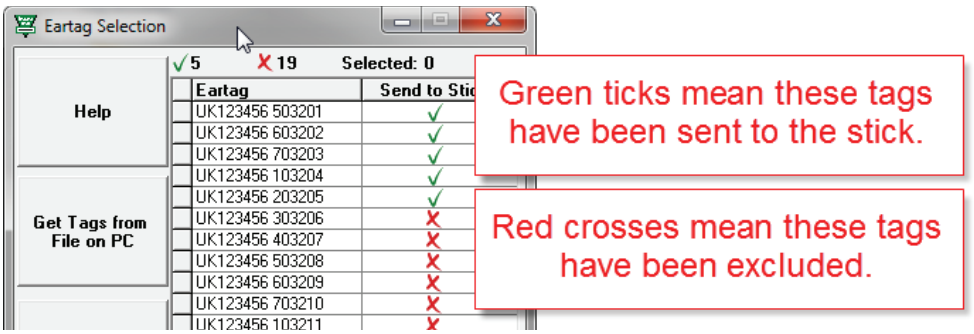

SDLConnect v1.5.4 © 2009 - 2015 Shearwell Data Ltd.
Read Tags from Stick
Erase Tags from Stick
Configure Stick
Exit
When reading tags, sort them into order
Display tags in:
Tag File Options
Hide Tag File Options
Set up Tag File
Send Tag File to Stick
Erase Tag File from Stick
This will send the entire tag file.



5. To send only selected tags to the stick reader highlight the tags you want on the grid. To select multiple tags hold down the control key, or hold down the shift key while selecting the first and last number in a series.



6. Click on ***Select Tags to Send to Stick***. Tags that have been sent will now have only a green tick beside. All tags will remain on the grid for selection next time the program is opened.
7. Tags that are NOT to be sent to the stick can be highlighted on the grid. Click on ***Deselect Tags from the List***. A red cross will be visible beside the number when it is deselected.
8. Delete tags that you will never want to send to the stick reader to reduce the size of the tag file. Highlight the unwanted tags on the grid and click on ***Delete Selected Tags from the List***. If you change your mind you must import the tag file again to restore those numbers to the grid.

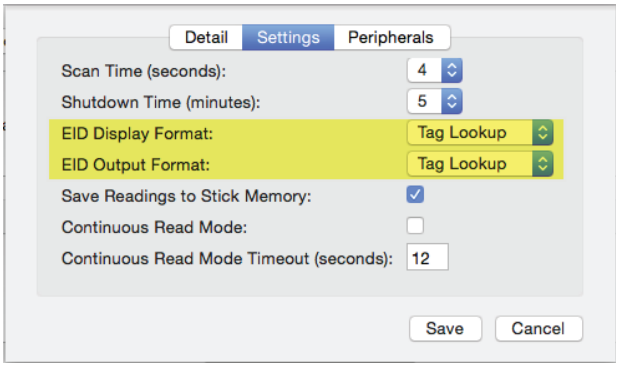


Working with tag files - Mac

- A 'WYSIWYG' tag has an electronic number (EID) that is the same as the number printed on the outside of the tag.
- A 'non-WYSIWYG' tag has an electronic number (EID) that is different than the number printed on the outside of the tag.
- A tag file is for non-WYSIWYG tags - a cross-reference between the EID inside the tag and the number printed on the outside.
- A tag file loaded into the stick reader software allows the stick reader to display the outside number instead of the internal EID number. Your tag manufacturer will supply this file for you when you purchase non-WYSIWYG tags. Learn more about EID and tag formats in ***EID Options*** in the Windows manual.

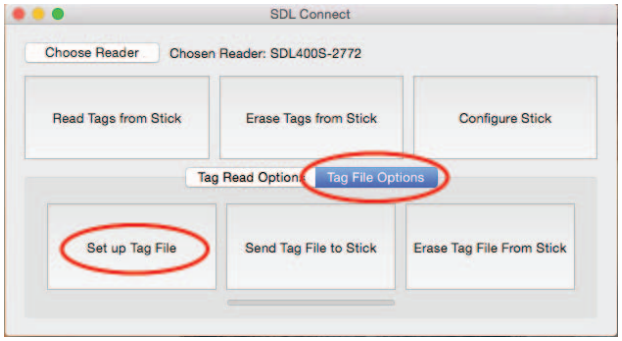
To load a tag file onto your stick reader:

- Turn on the stick reader.
  Open ***SDL Connect*** on your computer desktop.
- Click on ***Configure Stick***.
- Change EID Display Format to ***Tag Lookup***.
- Change EID Output Format to ***Tag Lookup***.
- Click ***Save.***

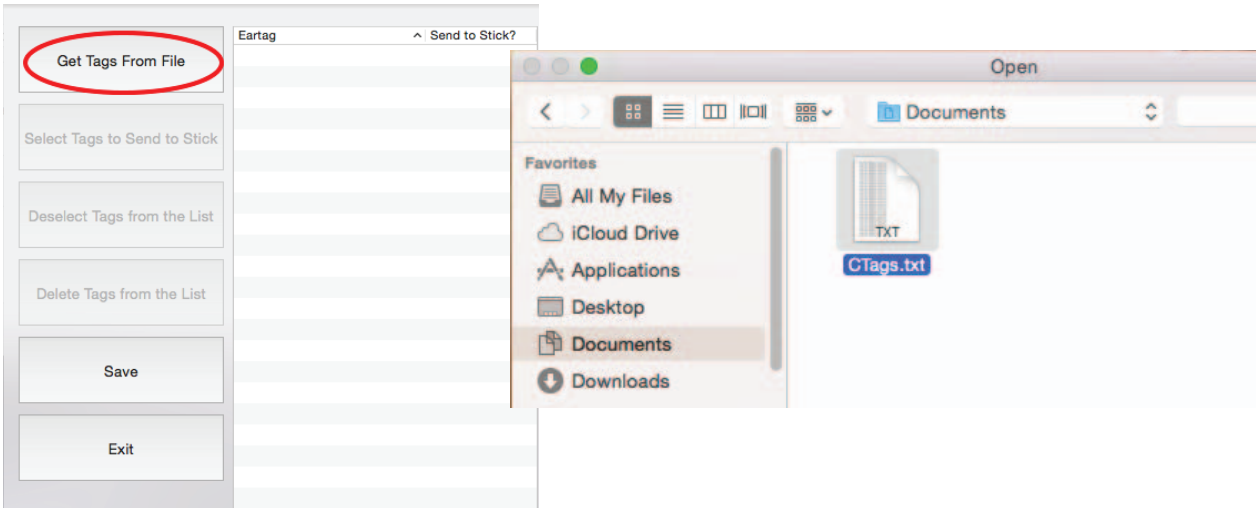


The tag file provided by your tag supplier must be saved on your computer.

- Click on the ***Tag File Options*** button.
- Select ***Set up Tag File***.



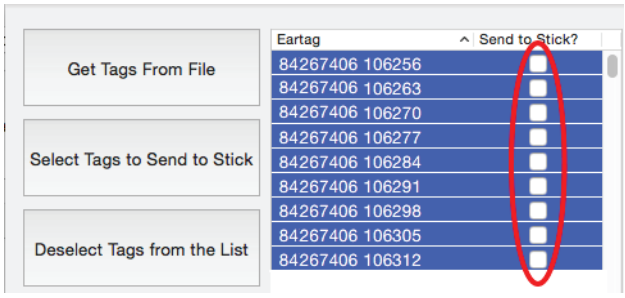
- Select ***Get Tags from File***.
- Find the tag file from your tag manufacturer - accepted tag formats are Shearwell, Allflex and Farm-Plan. For all others please check with Shearwell Support.
- Select the tag file. Click ***Open***. All the tag numbers in that tag file will be displayed.

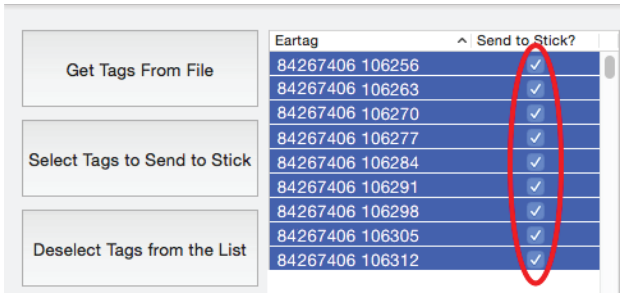


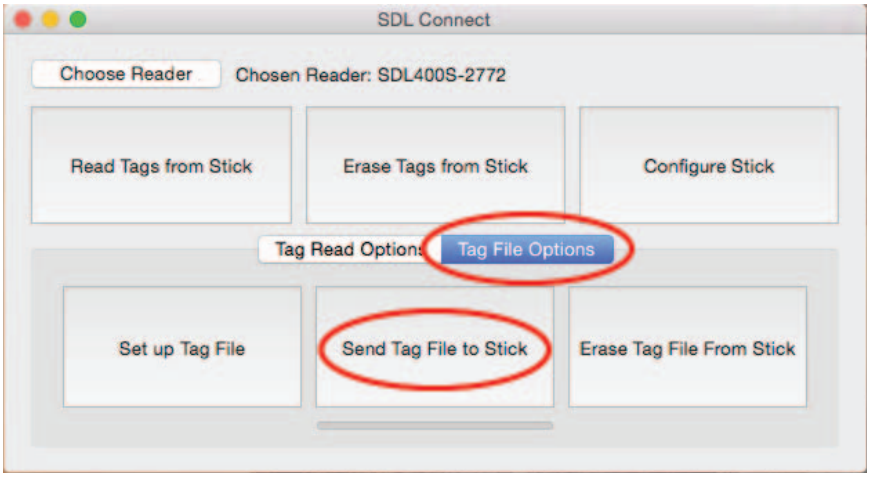
Working with tag files - Mac

Select the tags you want to send to the stick reader.

1. To send all the tags:
   - Highlight the first tag on the list, hold down the shift key and highlight the last tag on the list.
   - Click ***Select Tags to Send to Stick*** - a tick will appear beside each selected tag.
   - Click ***Save***.
   - Click Send Tag File to Stick. The blue light on the stick reader will flash blue.





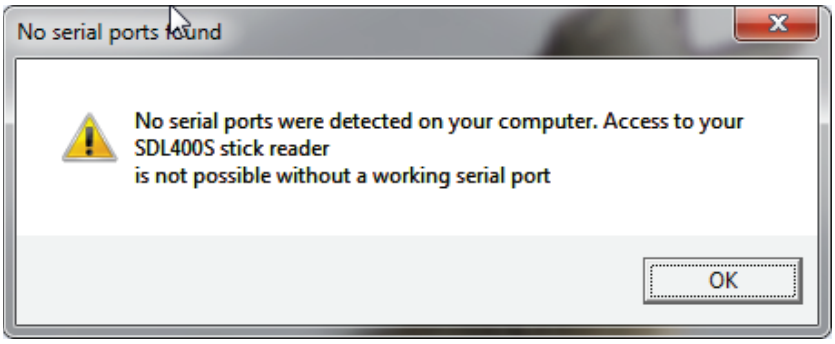


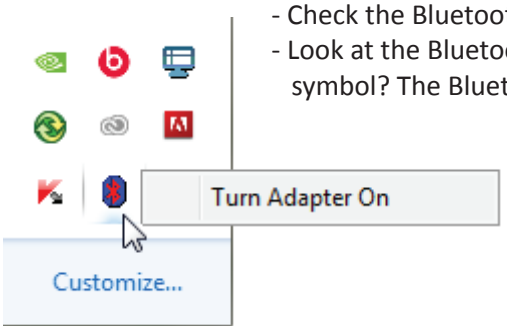
2. To send only selected tags to the stick reader highlight the tags you want on the grid. To select multiple tags hold down the command (Apple) key, or hold down the shift key while clicking the first and last number in a series.
   - Click ***Select Tags to Send to Stick*** - a tick will appear beside each selected tag.
   - Click ***Save***.
   - Click ***Send Tag File to Stick.*** The blue light on the stick reader will flash blue.
3. To remove a tag file click on ***Erase Tag File from Stick***. This will remove ALL tag files so be sure that none of the tags will ever need to be read again (i.e. animals are dead or sold).

Trouble-shooting

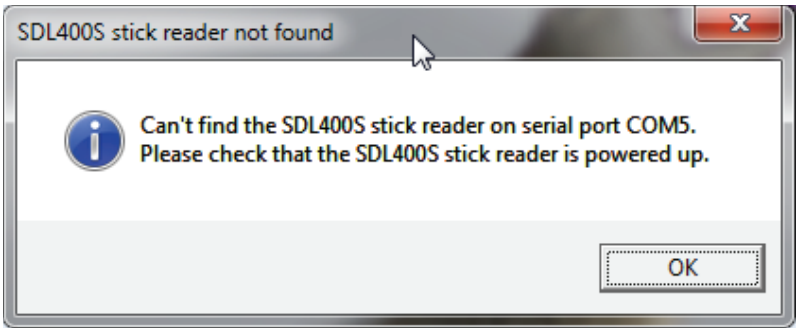
Error messages on the computer

1. No Bluetooth signal


No serial ports found
No serial ports were detected on your computer. Access to your SDL400S stick reader
is not possible without a working serial port
OK



- Check the Bluetooth adapter is plugged into a USB port (Windows).
- Look at the Bluetooth icon on your desktop or taskbar - is there a red or blue symbol? The Bluetooth adapter might be disabled.


SDL400S stick reader not found
Can't find the SDL400S stick reader on serial port COM5.
Please check that the SDL400S stick reader is powered up.
OK

2. No Bluetooth signal

- check the stick reader is turned on and the battery level is good.

3. Losing Bluetooth connection between the stick and the computer

- Battery level in the stick reader is getting low - insert fresh batteries or stop and recharge.

4. Wrong date and time

- Date and time are automatically sent to the stick reader from the computer software when the stick connects. A stick reader that isn't used very frequently will run down the back-up battery that runs the internal clock. To correct the date and time connect the stick reader and **SDL Connect** before you intend to use it.

If all else fails - remove the stick reader from your Bluetooth Devices and re-pair it.

Appendix I - Link to StockMove *Express* for Android

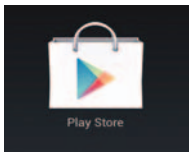
Note: The red-handled SDL400S stick reader will only link to an Android phone.

Phone Requirements

Stock Move Express for Android requires a smart phone or tablet running Google's Android operating system. The phone or tablet must have Bluetooth and will need Internet access via mobile data or WiFi.

Download StockMove Express

1. Touch the Google Play Store icon on the home page on your mobile phone or tablet. New users to the Play Store may be required to set up a Google account.



2. In the search box at the top, search for 'shearwell stock move'
3. Select ***StockMove Express*** in the search result, then press ***Install.***

Register with NLMD-LT

You must have an NLMD account to use StockMove Express.

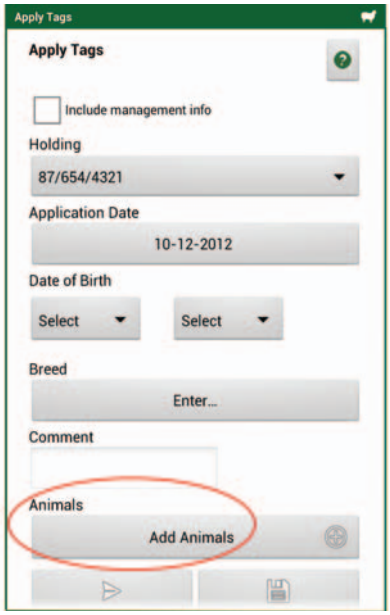
1. Open ***StockMove Express***. Register as a new user or log in if you already have an account.

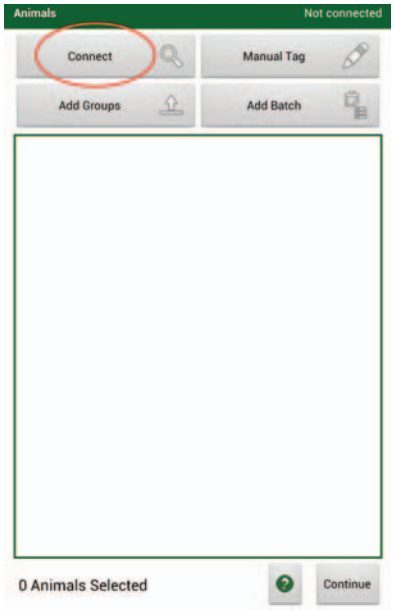
2. You can also register online at *www.nlmd-lt.co.uk*
3. Remember your user name and password - you will need them to log into ***StockMove Express***

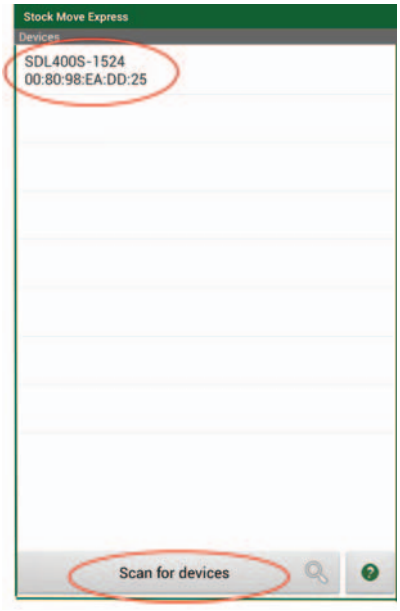
Connect to your stick reader

1. Turn on your stick reader.
2. Open ***StockMove Express***. Touch either the cow or the sheep icon.

3. Touch ***Statutory***.
4. Select an event to record - ***Movement*** or ***Tag Application*** or ***Death***.
5. Touch ***Add Animals***.
6. Touch ***Connect*** in the top left corner of the screen.
7. Touch ***Scan for Devices*** to find the Bluetooth signal from your stick reader.
8. Touch your stick reader Bluetooth number (ex. SDL400-XXXX). See page 10 of this manual for help finding the Bluetooth number.
9. Type in passcode ***1111.*** Touch ***OK.*** You are ready to scan tags.



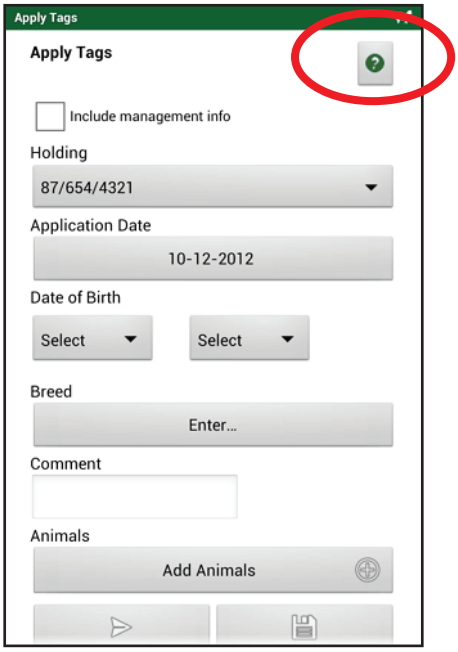




Appendix I - Link to StockMove *Express* for Android

Use the *StockMove Express* Help Guide

Touch the help icon at the top right-hand corner of any page to open a help screen.



Use the online help on NLMD-LT

Go to ***www.nlmd-lt.co.uk***
Click on ***Getting Started***

Setting Up

- Import Existing Animals
- Send Cattle Birth, Movements and Deaths to BCMS
- Send Sheep Movements to ARAMS (sheep movement database for England)
- Send Sheep Movements, Tag Applications and Deaths to ScotEID
- Add Holdings To Your Account
- Change Your Account Details
- Change Your Password

Recording

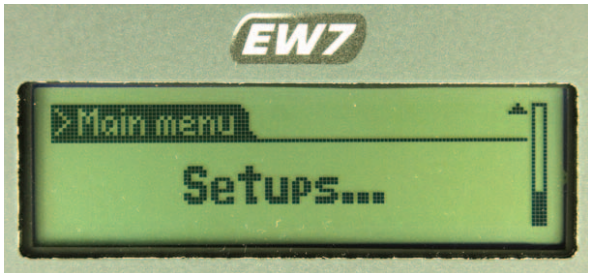
- Move Animals
- Births / Tag Applications
- On Farm Deaths
- Tag Replacement
- Administer Medicines to Animals
- Administer Treatment Procedures
- Purchase or Dispose a Medicine
- Record Comments

Appendix II - Link to a weigher - EziWeigh7

The SDL400S stick reader can be linked to a weigher that has Bluetooth. Devices with Bluetooth will have the Bluetooth symbol on the front.

The first step to link your stick reader to an EziWeigh7 is to find the Bluetooth ID of the weigher.

1. Push the power button to turn on the weigher.
2. Push the ***Menu*** button.
3. Use the bottom arrow to scroll down through the functions to ***Setups...***

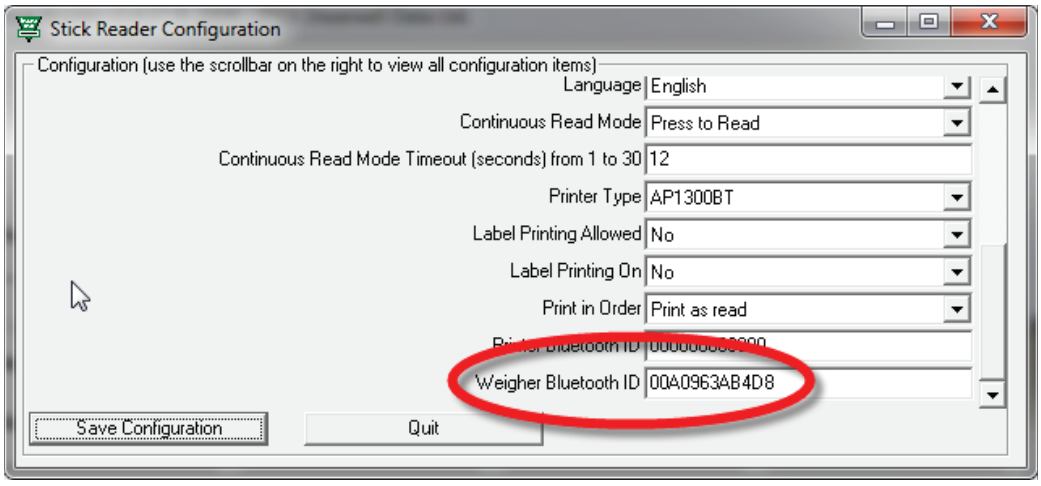


4. Push ***Enter***. Use the bottom arrow to scroll down through the functions to BT Address
5. Write down the BT address on a piece of paper, leaving out the colons. The example in the photo above would be BT Address 00A0963D2FA3.
6. Press the ***Escape*** button twice to exit.

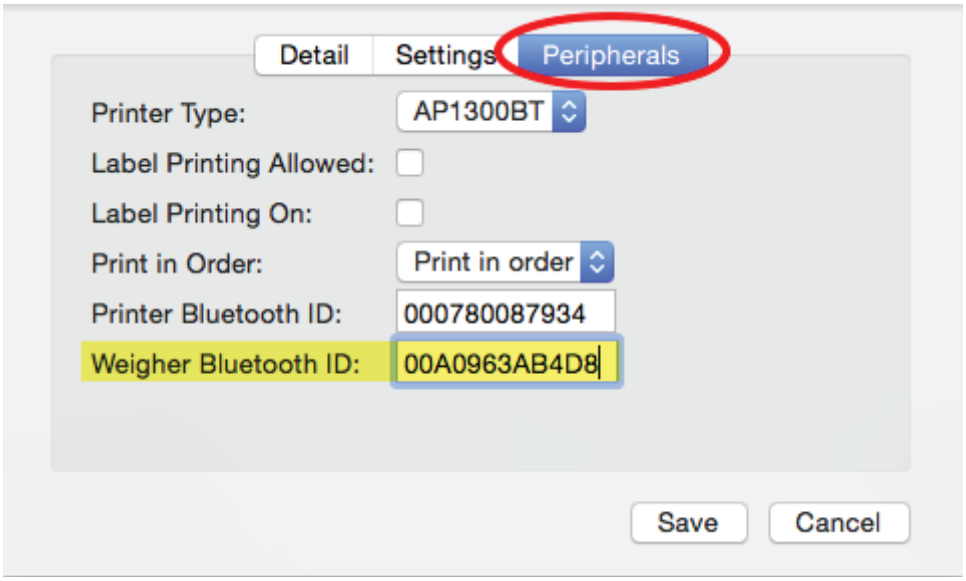
Appendix II - Link to a weigher - EziWeigh7

The second step to link your stick reader to an EziWeigh7 weigher is to change the configuration on your stick reader.

1. Make sure the Bluetooth adapter is plugged into a USB port on your computer (Windows).
2. Turn on the stick reader.
3. Click on the ***SDL Connect*** icon on your computer desktop. The blue light on the stick reader should flash as the Bluetooth connection is made.
4. Click on ***Configure Stick***.
5. For a Windows computer, scroll down to find the ***Weigher Bluetooth ID*** field. Type in the Bluetooth ID number for your weigher.
6. Click ***Save Configuration*** and ***Quit***.



7. On a Mac computer, click on ***Peripherals***.
8. Type in the Bluetooth ID number for your weigher in the ***Weigher Bluetooth ID*** field.
9. Click ***Save***.



Appendix II - Link to a weigher - EziWeigh7

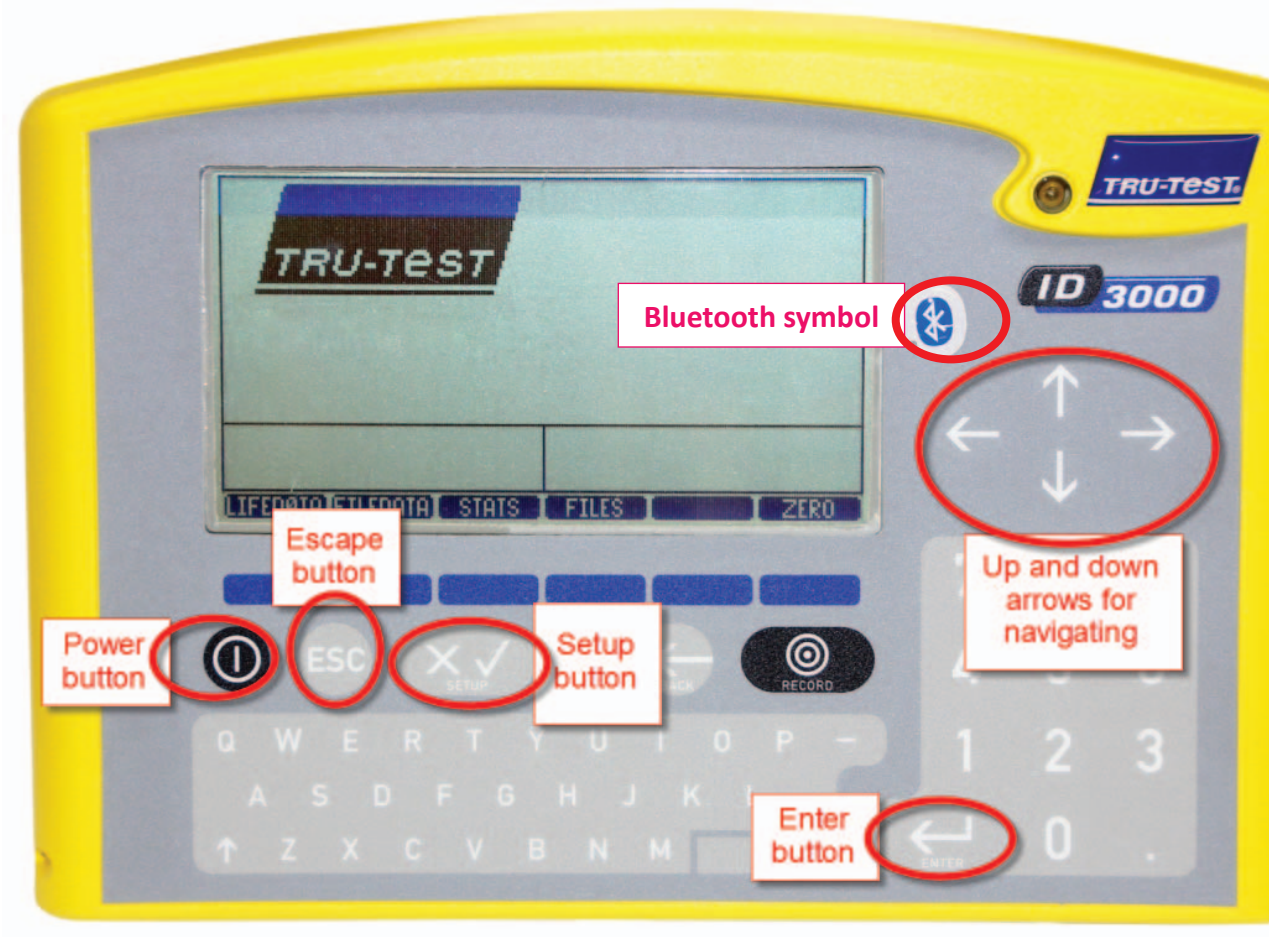
» Turn off your stick reader.
» Turn the stick reader back on, pressing and holding the green button to view the menu options.
» Release the button at ***Link to weigher?*** The blue light on the stick reader will glow when the Bluetooth connection is made.
» The stick reader and weigher are now linked - when a tag is scanned by the stick reader the EID number will be sent to the weigher and be displayed on the screen.

Appendix III - Link to a weigher - ID3000

The SDL400S stick reader can be linked to a weigher that has Bluetooth. Devices with Bluetooth will have the Bluetooth logo on the front. Weighers like the Tru-Test ID3000 purchased from Shearwell will have a label on the back with the Bluetooth information.

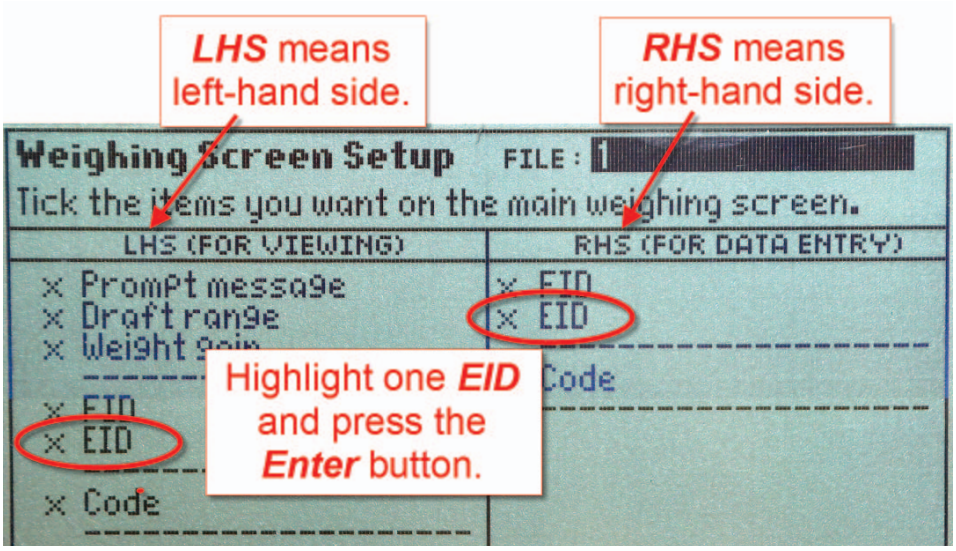
The first step to link a stick reader to an ID3000 weigher is to change the configuration on the weigher.

1. Press the power button to turn on the weigher.
2. Press the ***Setup*** button. The ***Weighing Screen Setup*** opens.

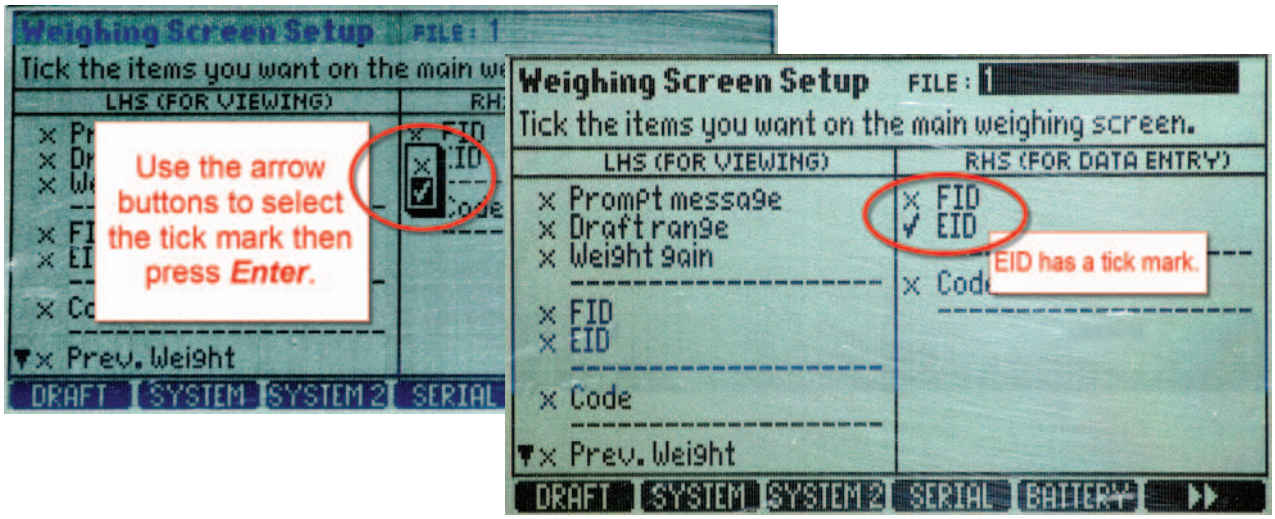


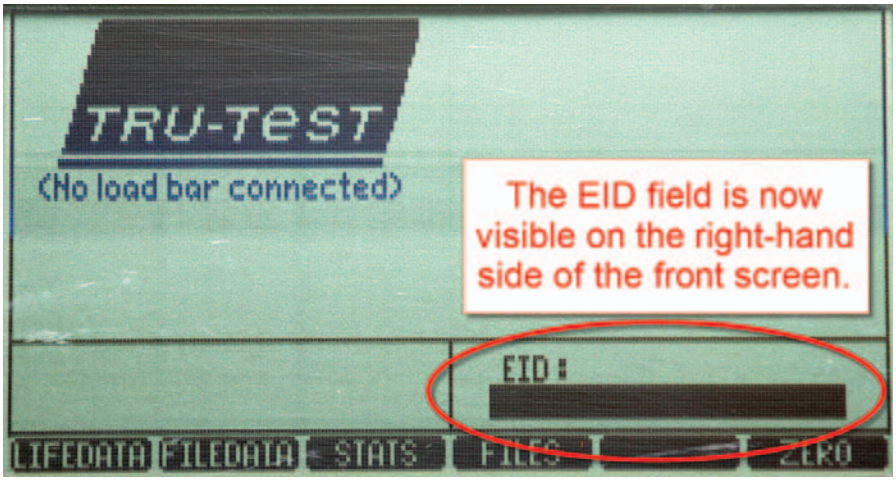
Appendix III - Link to a weigher - ID3000

3. On the weighing setup screen, use the up and down arrows to move around the screen. “RHS” means right-hand side; “LHS” means left-hand side.



4. Use the arrows to select ***EID***. Press the ***Enter*** button and use the arrows to select the tick mark. Press the ***Enter*** button to make the selection.
5. Press the ***ESC*** button to exit the setup screen. The EID field should now be visible on the front screen.

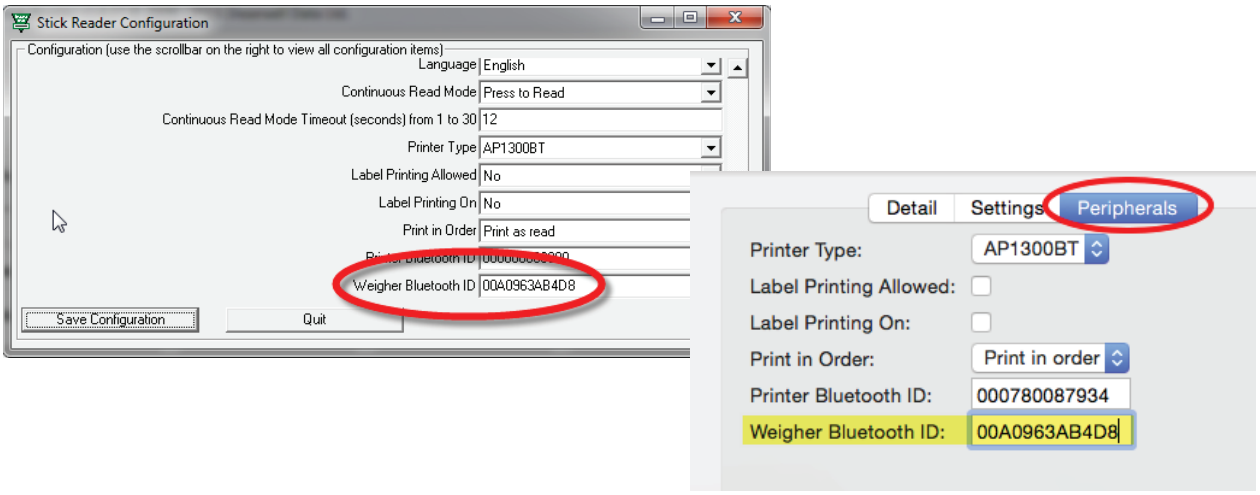




Appendix III - Link to a weigher - ID3000

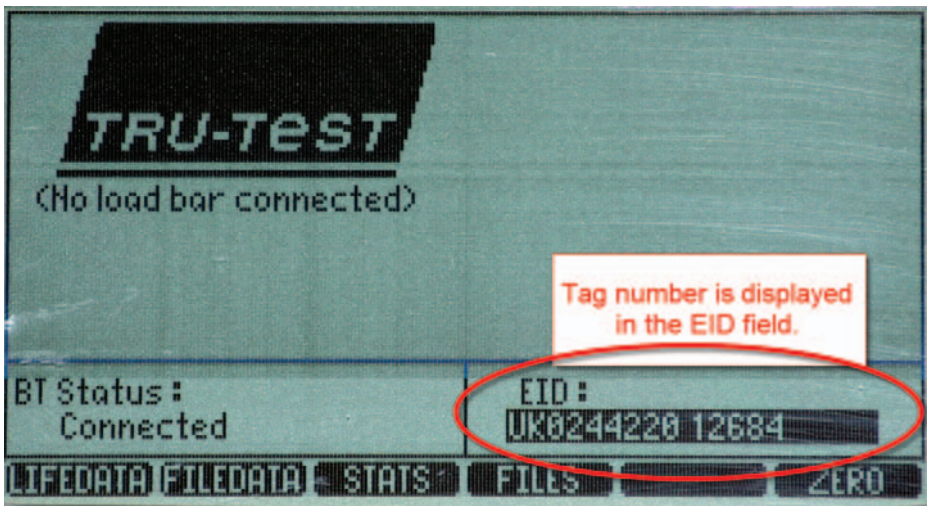
The second step to link your stick reader to an ID3000 weigher is to change the configuration on your stick reader.

1. Make sure the Bluetooth adapter is plugged into a USB port on your computer (Windows).
2. Turn on the stick reader.
3. Click on the ***SDL Connect*** icon on your computer desktop. The blue light on the stick reader should flash as the Bluetooth connection is made.
4. Click on ***Configure Stick***.
5. For a Windows computer, scroll down to find the ***Weigher Bluetooth ID*** field. Type in the Bluetooth ID number for your weigher.
6. Click ***Save Configuration*** and ***Quit***.


Stick Reader Configuration
Configuration (use the scrollbar on the right to view all configuration items)
Language English
Continuous Read Mode Press to Read
Continuous Read Mode Timeout (seconds) from 1 to 30 12
Printer Type AP1300BT
Label Printing Allowed No
Label Printing On No
Print in Order Print as read
Weigher Bluetooth ID 00A0963AB4D8
Save Configuration
Quit
Detail
Settings
Peripherals
Printer Type: AP1300BT
Label Printing Allowed:
Label Printing On:
Print in Order: Print in order
Printer Bluetooth ID: 000780087934
Weigher Bluetooth ID: 00A0963AB4D8

7. On a Mac computer, click on ***Peripherals***.
8. Type in the Bluetooth ID number for your weigher in the ***Weigher Bluetooth ID*** field.
9. Click ***Save***.

» Turn off your stick reader.
» Turn the stick reader back on, pressing and holding the green button to view the menu options.
» Release the button at ***Link to weigher?*** The blue light on the stick reader should flash as the Bluetooth connection is made.
» The stick reader and weigher are now linked - when a tag is scanned by the stick reader the EID number will be sent to the weigher and be displayed on the screen.



Contact us

For technical support telephone: **+44 (0) 1643 841814**
You can email technical support at: **support@shearwell.co.uk**
For general enquiries telephone: **+44 (0) 1643 842100**
Fax: **+44 (0) 1643 841628**
Alternatively visit our website at: **www.shearwell.co.uk**

Lines are open from Monday to Friday between 8am - 5pm GMT.

Certification

FCC ID: YVSSDL400S

The SDL400S complies with parts15.207 and 15.209 of the FCC rules CFR47:2009. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

The SDL400S operates at a frequency of 134.2KHz and complies with part 15C emission requirements. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference in which case the user will be required to correct the interference at his own expense.

IC: 8856A-SDL400S

The SDL400S also complies with Industry Canada RSS-210 issue 7. This SDL400S complies with Industry Canada licence-exempt RSS standard (s).

N29666